



RF MEASUREMENT REPORT

FCC ID: Z9G-EDF250
Applicant: Edifier International Limited
Product: True Wireless Earbuds with Active Noise Cancellation
Model No.: EDF200172
Brand Name: EDIFIER
FCC Classification: Digital Transmission System (DTS)
FCC Rule Part(s): Part 15 Subpart C (Section 15.247)
Result: Complies
Received Date: 2024-06-03
Test Date: 2024-06-04 ~ 2024-06-13

Reviewed By:

Denise Zhou

Approved By:

Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Shenzhen) Co., Ltd.

Template Version:0.0

Revision History

Report No.	Version	Description	Issue Date	Note
2406RSZ004-U2	V01	Initial Report	2024-06-27	Valid

CONTENTS

Description	Page
1. General Information	5
1.1. Applicant.....	5
1.2. Manufacturer.....	5
1.3. Testing Facility.....	5
1.4. Product Information.....	6
1.5. Radio Specification under Test.....	6
1.6. Working Frequencies	7
2. Test Configuration.....	8
2.1. Test Mode	8
2.2. Test System Connection Diagram	8
2.3. Test Software	9
2.4. Applied Standards	9
2.5. Test Environment Condition.....	9
3. Antenna Requirements.....	10
4. Measuring Instrument	11
5. Decision Rules and Measurement Uncertainty.....	12
5.1. Decision Rules	12
5.2. Measurement Uncertainty	12
6. Test Result	13
6.1. Summary	13
6.2. 6dB Bandwidth Measurement	14
6.2.1. Test Limit.....	14
6.2.2. Test Procedure	14
6.2.3. Test Setting	14
6.2.4. Test Setup	14
6.2.5. Test Result	14
6.3. Output Power Measurement	15
6.3.1. Test Limit.....	15
6.3.2. Test Procedure	15
6.3.3. Test Setting	15
6.3.4. Test Setup	15
6.3.5. Test Result	15
6.4. Power Spectral Density Measurement.....	16
6.4.1. Test Limit.....	16
6.4.2. Test Procedure	16

6.4.3.	Test Setting	16
6.4.4.	Test Setup	16
6.4.5.	Test Result	16
6.5.	Conducted Band Edge and Out-of-Band Emissions Measurement	17
6.5.1.	Test Limit.....	17
6.5.2.	Test Procedure	17
6.5.3.	Test Settintg	17
6.5.4.	Test Setup	18
6.5.5.	Test Result	18
6.6.	Radiated Spurious Emission Measurement	19
6.6.1.	Test Limit.....	19
6.6.2.	Test Procedure	19
6.6.3.	Test Setting	19
6.6.4.	Test Setup	21
6.6.5.	Test Result	22
6.7.	Radiated Restricted Band Edge Measurement	23
6.7.1.	Test Limit.....	23
6.7.2.	Test Procedure	24
6.7.3.	Test Setting	24
6.7.4.	Test Setup	25
6.7.5.	Test Result	26
6.8.	AC Conducted Emissions Measurement	27
6.8.1.	Test Limit.....	27
6.8.2.	Test Setup	27
6.8.3.	Test Result	27
Appendix A - Test Result.....		28
A.1	Duty Cycle Test Result	28
A.2	6dB Bandwidth Test Result	29
A.3	Output Power Test Result	31
A.4	Power Spectral Density Test Result.....	32
A.5	Conducted Band Edge and Out-of-Band Emissions Test Result.....	34
A.6	Radiated Spurious Emission Test Result	39
A.7	Radiated Restricted Band Edge Test Result.....	45
Appendix B - Test Setup Photograph.....		61
Appendix C - EUT Photograph		62

1. General Information

1.1. Applicant

Edifier International Limited

P.O. Box 6264 General Post Office Hong Kong

1.2. Manufacturer

Beijing Edifier Technology Co., Ltd.

815, Floor 8, Shuangqiao Building, No.68, North Fourth Ring West Road, Haidian District, Beijing 100080,
P.R.China

1.3. Testing Facility

☐	Test Site – MRT Suzhou Laboratory				
	Laboratory Location (Suzhou - Wuzhong)				
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China				
	Laboratory Location (Suzhou - SIP)				
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China				
	Laboratory Accreditations				
A2LA: 3628.01		CNAS: L10551			
FCC: CN1166		ISED: CN0001			
VCCI:	☐ R-20025	☐ G-20034	☐ C-20020	☐ T-20020	
	☐ R-20141	☐ G-20134	☐ C-20103	☐ T-20104	
☒	Test Site – MRT Shenzhen Laboratory				
	Laboratory Location (Shenzhen)				
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China				
	Laboratory Accreditations				
	A2LA: 3628.02		CNAS: L10551		
	FCC: CN1284		ISED: CN0105		
☐	Test Site – MRT Taiwan Laboratory				
	Laboratory Location (Taiwan)				
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)				
	Laboratory Accreditations				
	TAF: 3261				
	FCC: 291082, TW3261		ISED: TW3261		

1.4. Product Information

Product Name	True Wireless Earbuds with Active Noise Cancellation
Model No.	EDF200172
EUT Identification No.	20240603Sample#01-L (Left Earbud for Radiated) 20240603Sample#01-R (Right Earbud for Radiated) 20240603Sample#02-L (Left Earbud for Conducted) 20240603Sample#02-R (Right Earbud for Conducted)
Bluetooth Specification	V5.4 Dual Mode
Antenna Information	Refer to Section 1.5
Product Voltage	5V DC 1A (For Charing case) 5V DC 200mA (For Earbuds)
Rechargeable Li-ion Battery	Model: VDL 1254W1 Rated: 3.85V, 90mAh Manufacturer: Chongqing VDL Electronics Co., Ltd.
Remark: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

1.5. Radio Specification under Test

Bluetooth Frequency	2402 ~ 2480MHz
Channel Number	40
Type of modulation	GFSK
Data Rate	1Mbps
Antenna Type	FPC Antenna
Antenna Gain	Left Earbud Gain: -2.18dBi Right Earbud Gain: -2.47dBi

1.6. Working Frequencies

Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz
03	2408 MHz	04	2410 MHz	05	2412 MHz
06	2414 MHz	07	2416 MHz	08	2418 MHz
09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz
15	2432 MHz	16	2434 MHz	17	2436 MHz
18	2438 MHz	19	2440 MHz	20	2442 MHz
21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz
27	2456 MHz	28	2458 MHz	29	2460 MHz
30	2462 MHz	31	2464 MHz	32	2466 MHz
33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz
39	2480 MHz	--	--	--	--

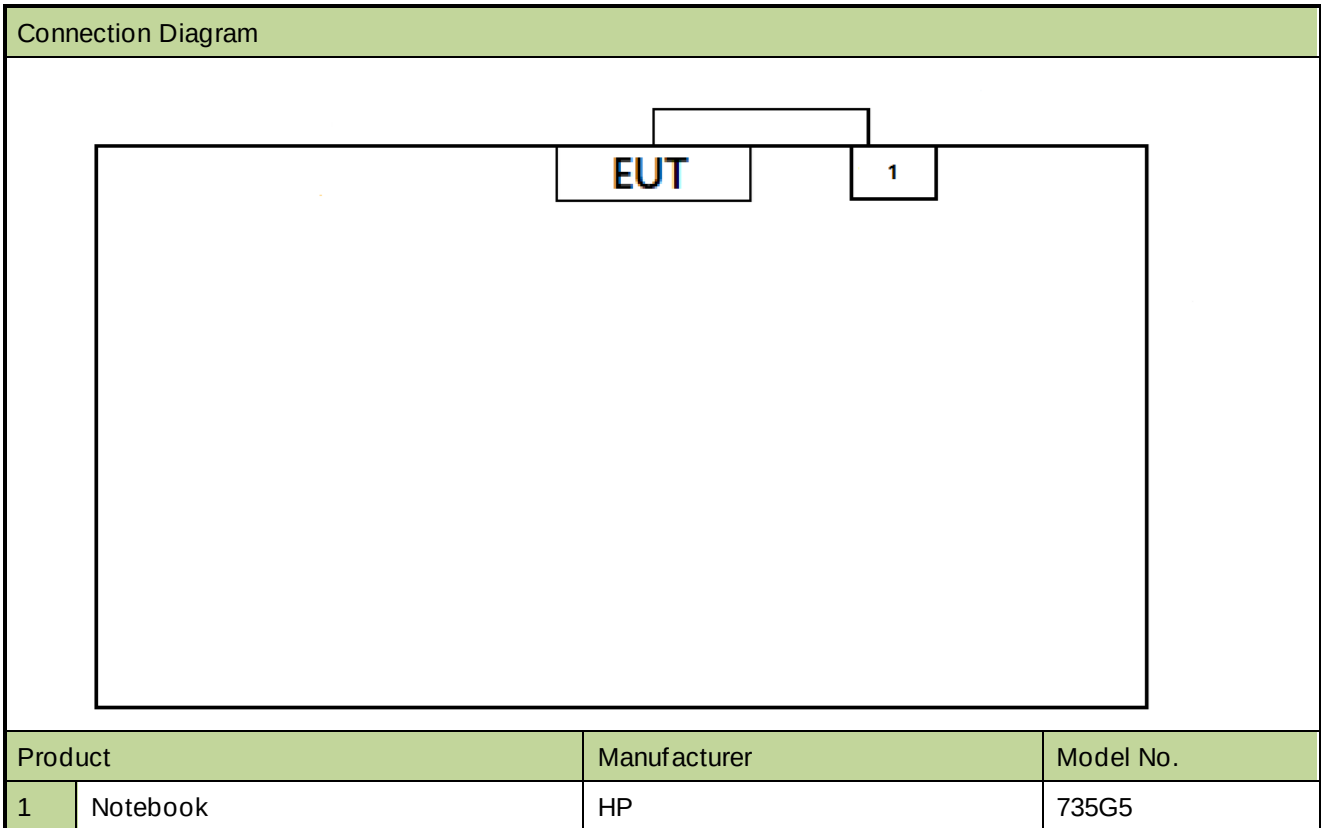
2. Test Configuration

2.1. Test Mode

Mode 1: Transmit by BLE-1Mbps

2.2. Test System Connection Diagram

The device was tested per the guidance ANSI C63.10: 2013 was used to reference the appropriate EUT setup for radiated emissions testing.



2.3. Test Software

The test utility software used during testing was “BQB”, and the version was 20220506.

2.4. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15.247
- KDB 558074 D01v05r02
- ANSI C63.10-2013

2.5. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20 ~75%RH

3. Antenna Requirements

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- The antenna of the device is **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The unit complies with the requirement of §15.203.

4. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
Signal Analyzer	Agilent	N9010A	MRTSUE06195	1 year	2024-12-10	NS-AC1/NS-SR1
Anechoic Chamber	BOOMWAVE	NS-AC1	MRTSUE06496	1 year	2024-07-12	NS-AC1
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06572	1 year	2025-03-15	NS-AC1
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06573	1 year	2025-05-12	NS-AC1
EMI Test Receiver	R&S	ESR3	MRTSUE06575	1 year	2024-06-18	NS-AC1
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06574	1 year	2024-07-07	NS-AC1
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06292	1 year	2024-10-21	NS-AC1
Preamplifier	EMCI	EMC184045SE	MRTSUE06641	1 year	2025-01-07	NS-AC1
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2024-09-17	NS-AC1
Thermohygrometer	testo	608-H1	MRTSUE06294	1 year	2025-05-14	NS-AC1
USB Power Sensor	Keysight	U2021XA	MRTSUE06581	1 year	2024-06-30	NS-SR1
Attenuator	MVE	MVE2213	MRTSUE11063	1 year	2025-06-06	NS
Attenuator	MVE	MVE2213	MRTSUE11064	1 year	2025-06-06	NS
Attenuator	MVE	MVE2213	MRTSUE11065	1 year	2025-06-06	NS
Thermohygrometer	testo	608-H1	MRTSUE06295	1 year	2025-05-14	NS-SR1

Software	Version	Function
EMI V3	V 3.0.0	EMI Test Software
Controller_T-E-TAC-2	1.02	RE Antenna & Turntable
Agilent Power Panel	V 3.9	Power

5. Decision Rules and Measurement Uncertainty

5.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2.
(Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

AC Conducted Emission Measurement
The maximum measurement uncertainty is evaluated as: 9kHz~150kHz: 3.58dB 150kHz~30MHz: 3.20dB
Radiated Emission Measurement
The maximum measurement uncertainty is evaluated as: Coaxial: 9kHz~30MHz: 2.61dB Coplanar: 9kHz~30MHz: 2.62dB Horizontal: 30MHz~200MHz: 3.79dB 200MHz~1GHz: 3.91dB 1GHz~40GHz: 4.99dB Vertical: 30MHz~200MHz: 4.06dB 200MHz~1GHz: 5.21dB 1GHz~40GHz: 4.90dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 2.2dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 1.4dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 2.2dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 2.7%

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.247(a)(2)	6dB Bandwidth	Conducted	Pass
15.247(b)(3)	Output Power		Pass
15.247(e)	Power Spectral Density		Pass
15.247(d)	Band Edge / Out-of-Band Emissions		Pass
15.205 15.209	General Field Strength (Restricted Bands and Radiated Emission)	Radiated	Pass
15.207	AC Conducted Emissions 150kHz - 30MHz	Line Conducted	N/A

Notes:

1. The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
2. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.
3. The "N/A" means this item is not applicable.

6.2. 6dB Bandwidth Measurement

6.2.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

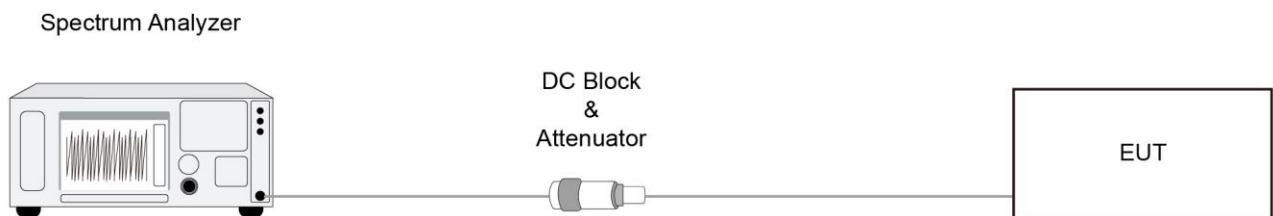
6.2.2. Test Procedure

ANSI C63.10 - 2013 - Section 11.8

6.2.3. Test Setting

1. The Spectrum's automatic bandwidth measurement capability was used to perform the 6dB bandwidth measurement. The "X" dB bandwidth parameter was set to $X = 6$. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. Set RBW = 100 kHz
3. $VBW \geq 3 \times RBW$
4. Detector = Peak
5. Trace mode = Max hold
6. Sweep = Auto couple
7. Allow the trace to stabilize

6.2.4. Test Setup



6.2.5. Test Result

Refer to Appendix A.2.

6.3. Output Power Measurement

6.3.1. Test Limit

The maximum output power shall be less 1 Watt (30dBm).

The conducted output power limit specified in paragraph FCC Part 15.247(b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs FCC Part 15.247(b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.3.2. Test Procedure

ANSI C63.10 - 2013 - Section 11.9.1.3

ANSI C63.10 - 2013 - Section 11.9.2.3.2

6.3.3. Test Setting

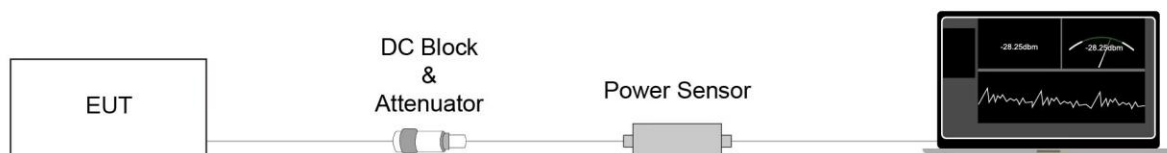
Method PKPM1 (Peak Power Measurement of Signals with DTS BW $\leq$ 50MHz)

Peak power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The pulse sensor employs a VBW = 50MHz so this method was only used for signals whose DTS bandwidth was less than or equal to 50MHz.

Average Power Measurement

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

6.3.4. Test Setup



6.3.5. Test Result

Refer to Appendix A.3.

6.4. Power Spectral Density Measurement

6.4.1. Test Limit

The maximum permissible power spectral density is 8dBm in any 3 kHz band.

The same method of determining the conducted output power shall be used to determine the power spectral density.

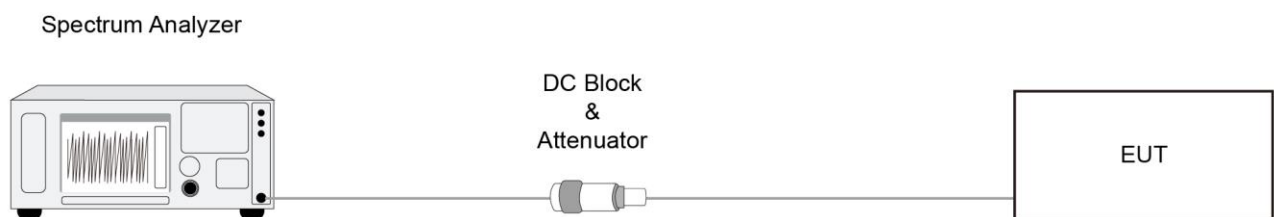
6.4.2. Test Procedure

ANSI C63.10-2013 Section 11.10.2

6.4.3. Test Setting

1. Analyzer was set to the center frequency of the DTS channel under investigation
2. Span = 1.5 times the DTS channel bandwidth
3. RBW = 3kHz
4. VBW = 10kHz
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Trace was allowed to stabilize

6.4.4. Test Setup



6.4.5. Test Result

Refer to Appendix A.4.

6.5. Conducted Band Edge and Out-of-Band Emissions Measurement

6.5.1. Test Limit

The limit for out-of-band spurious emissions at the band edge is 30dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth per the PSD procedure.

6.5.2. Test Procedure

ANSI C63.10-2013 - Section 11.11

6.5.3. Test Setting

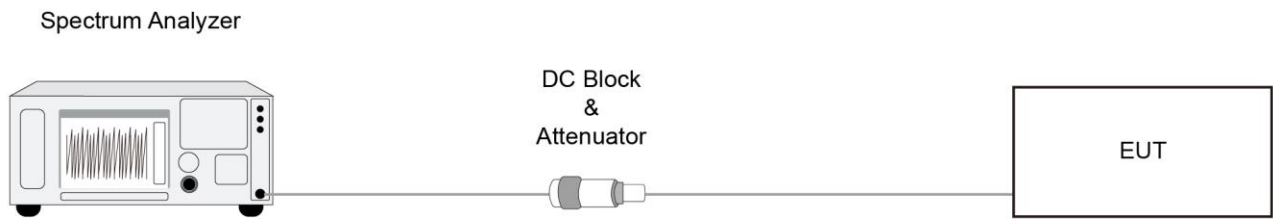
Reference level measurement

1. Set instrument center frequency to DTS channel center frequency
2. Set the span to ≥ 1.5 times the DTS bandwidth
3. Set the RBW = 100 kHz
4. Set the VBW $\geq 3 \times$ RBW
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize

Emission level measurement

1. Set the center frequency and span to encompass frequency range to be measured
2. RBW = 100kHz
3. VBW = 300kHz
4. Detector = Peak
5. Trace mode = max hold
6. Sweep time = auto couple
7. The trace was allowed to stabilize

6.5.4. Test Setup



6.5.5. Test Result

Refer to Appendix A.5.

6.6. Radiated Spurious Emission Measurement

6.6.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [$\mu\text{V/m}$]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.6.2. Test Procedure

ANSI C63.10 - 2013 - Section 11.11 & 11.12

ANSI C63.10 - 2013 - Section 6.3 (General Requirements)

ANSI C63.10 - 2013 - Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 - 2013 - Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 - 2013 - Section 6.6 (Standard test method above 1GHz)

6.6.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000MHz	1MHz

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = as specified in Table 1
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Peak Measurements above 1GHz

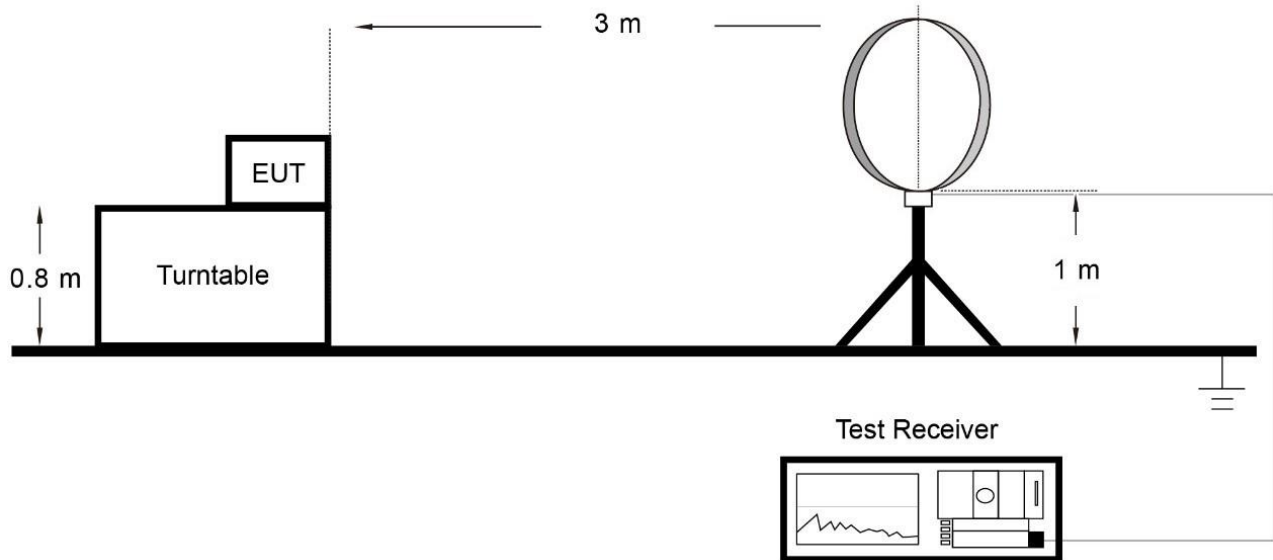
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

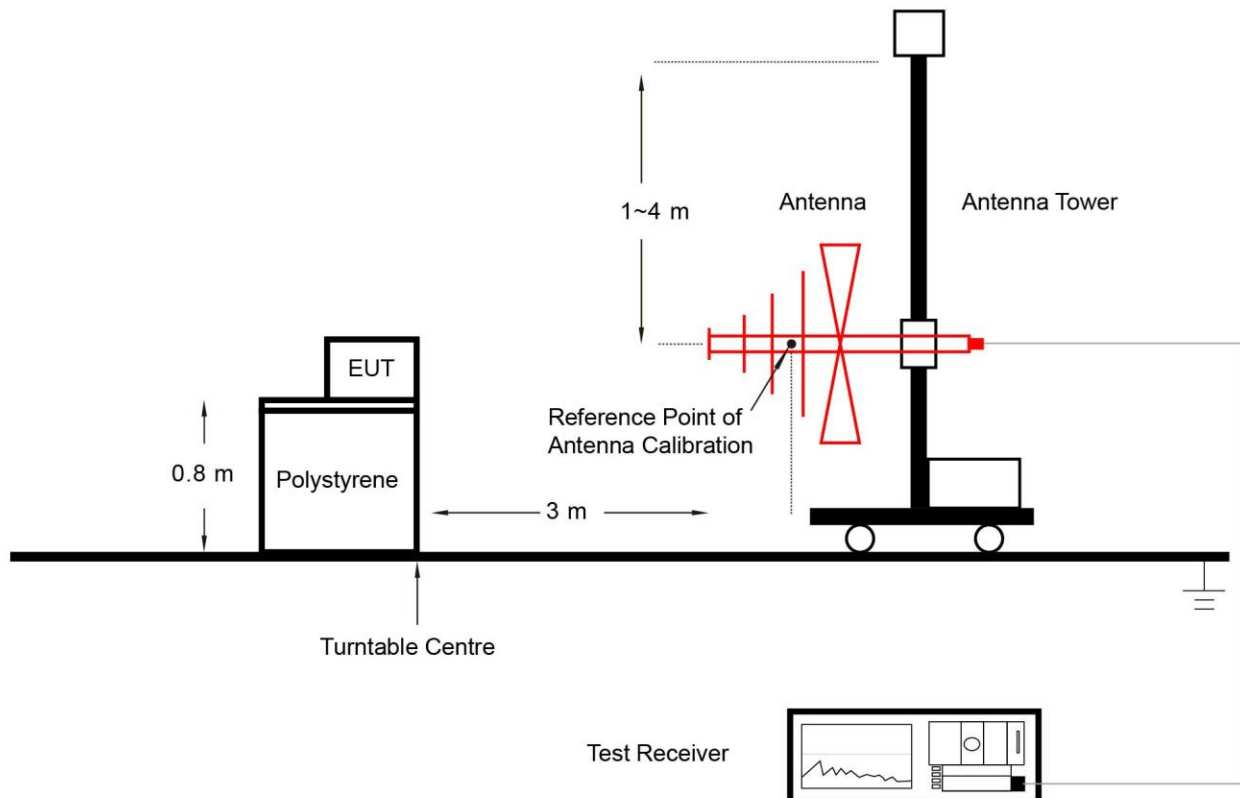
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; if the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10Hz
If the EUT duty cycle is $< 98\%$, set $\text{VBW} \geq 1/T$. T is the minimum transmission duration.
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

6.6.4. Test Setup

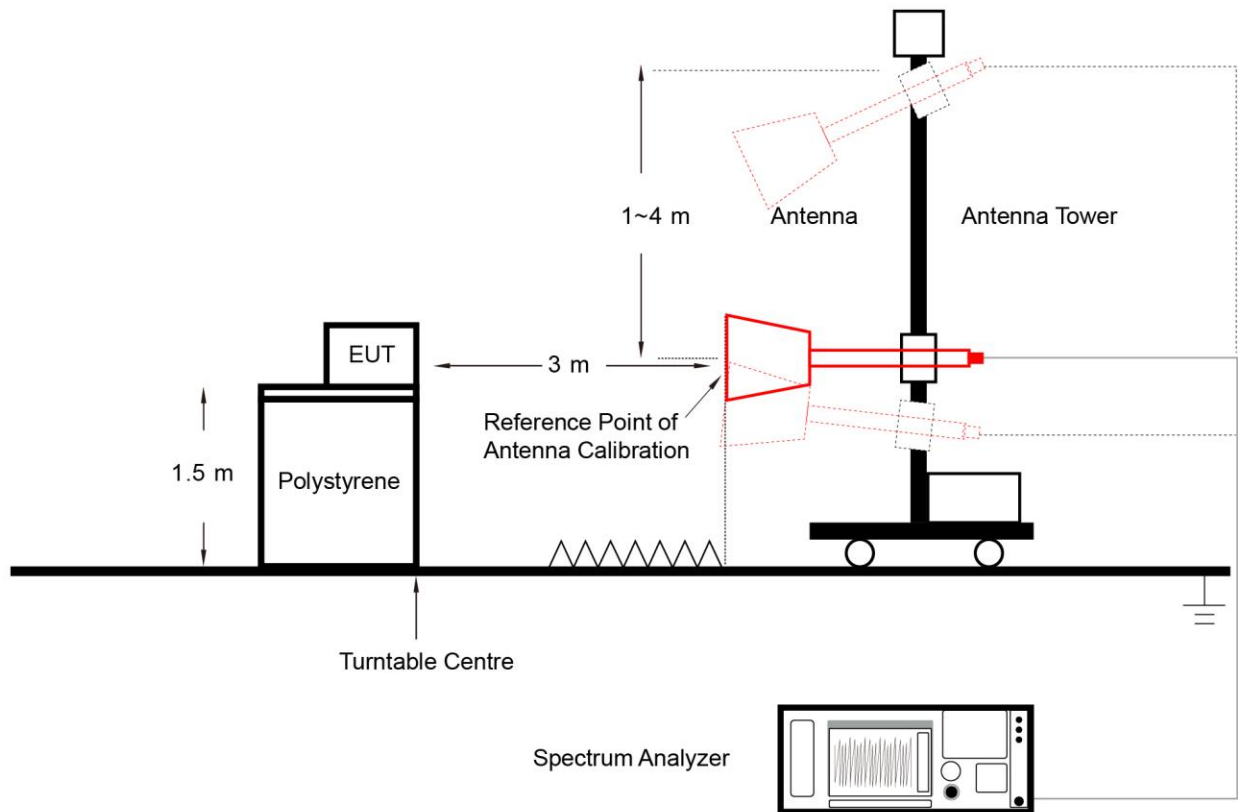
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.6.5. Test Result

Refer to Appendix A.6.

6.7. Radiated Restricted Band Edge Measurement

6.7.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [μ V/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.7.2. Test Procedure

ANSI C63.10-2013 Section 6.3 & 6.6 & 11.13

6.7.3. Test Setting

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

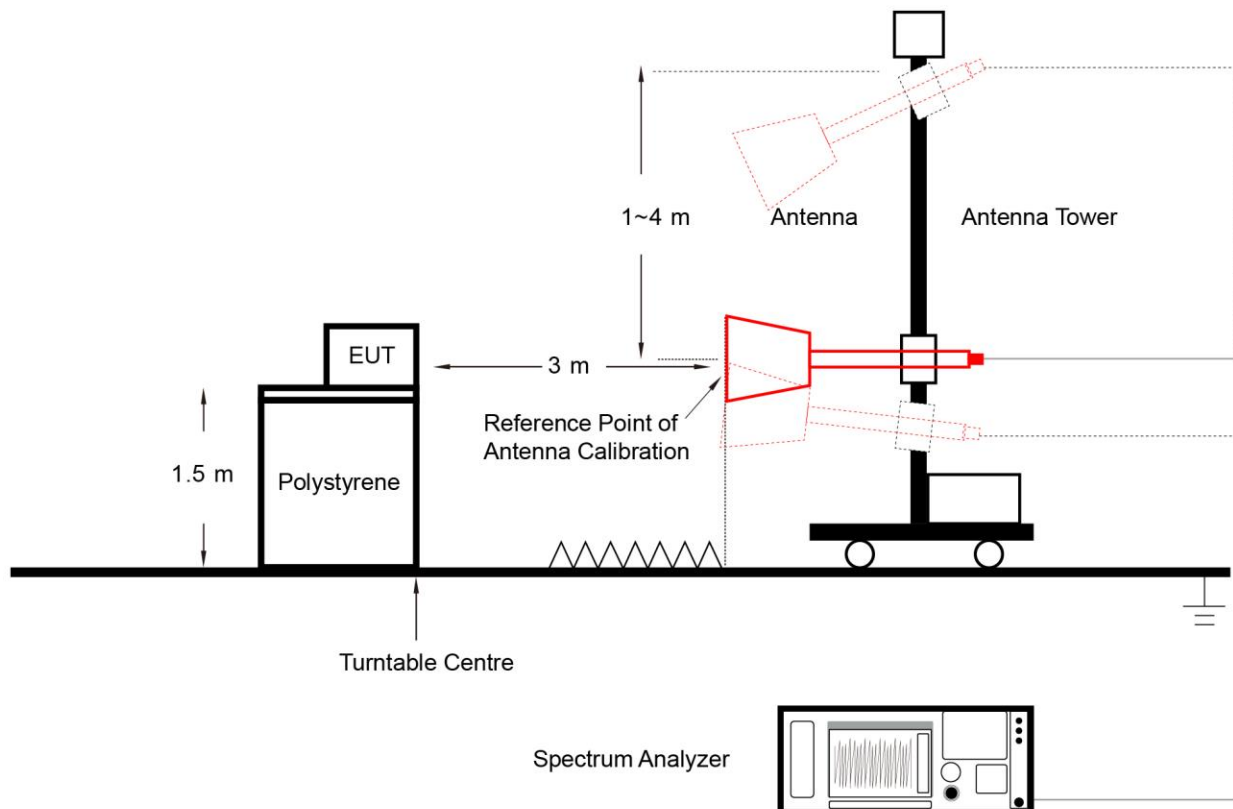
Average Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.

If the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$. T is the minimum transmission duration.

4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

6.7.4. Test Setup



6.7.5. Test Result

Refer to Appendix A.7.

6.8. AC Conducted Emissions Measurement

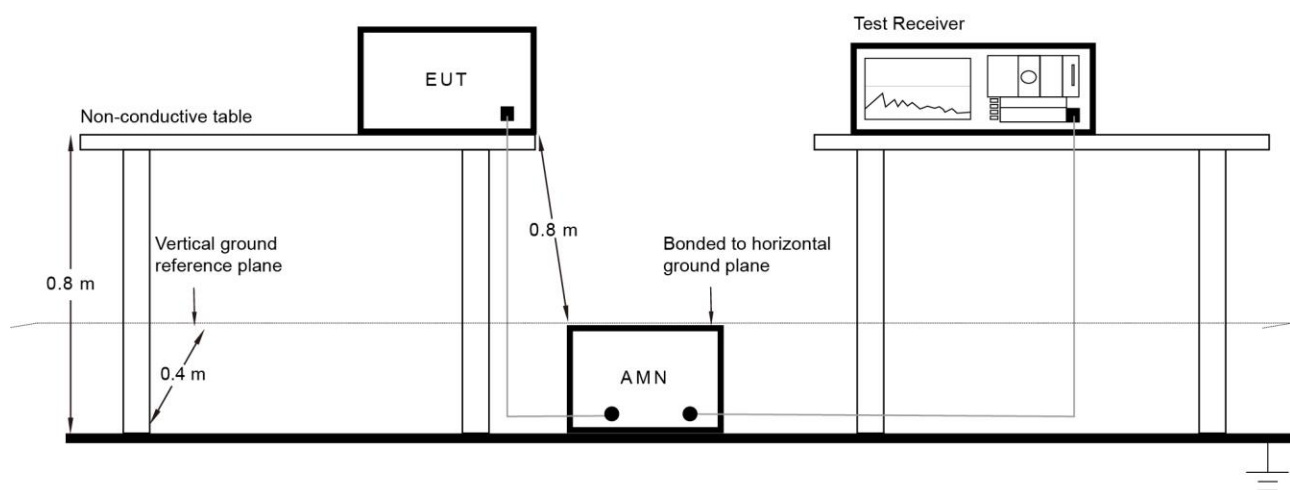
6.8.1. Test Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	AV (dB μ V)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

6.8.2. Test Setup



6.8.3. Test Result

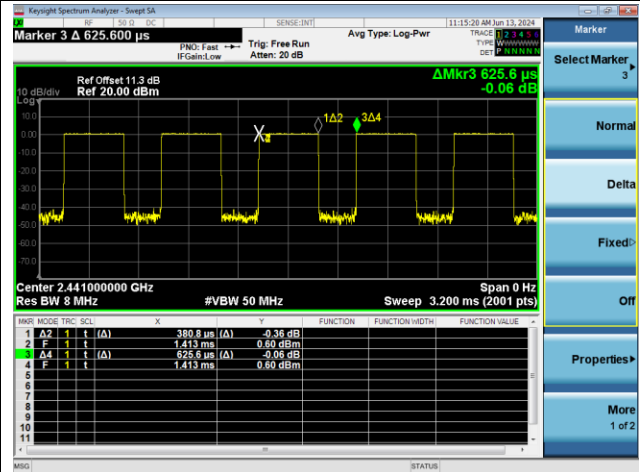
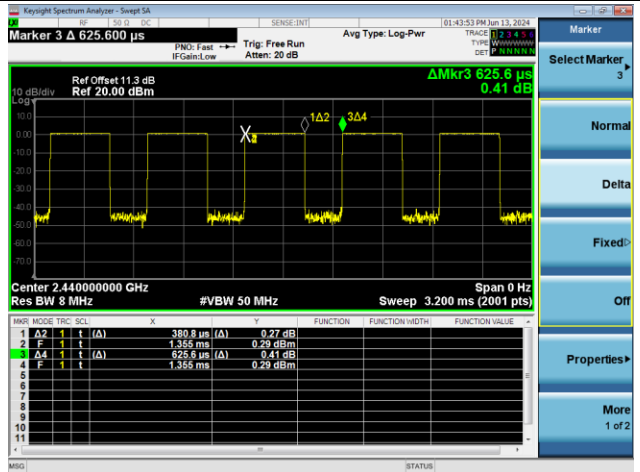
The EUT is powered by battery, so this item is not applicable.

Appendix A - Test Result

A.1 Duty Cycle Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2024-06-11 ~ 2024-06-13		

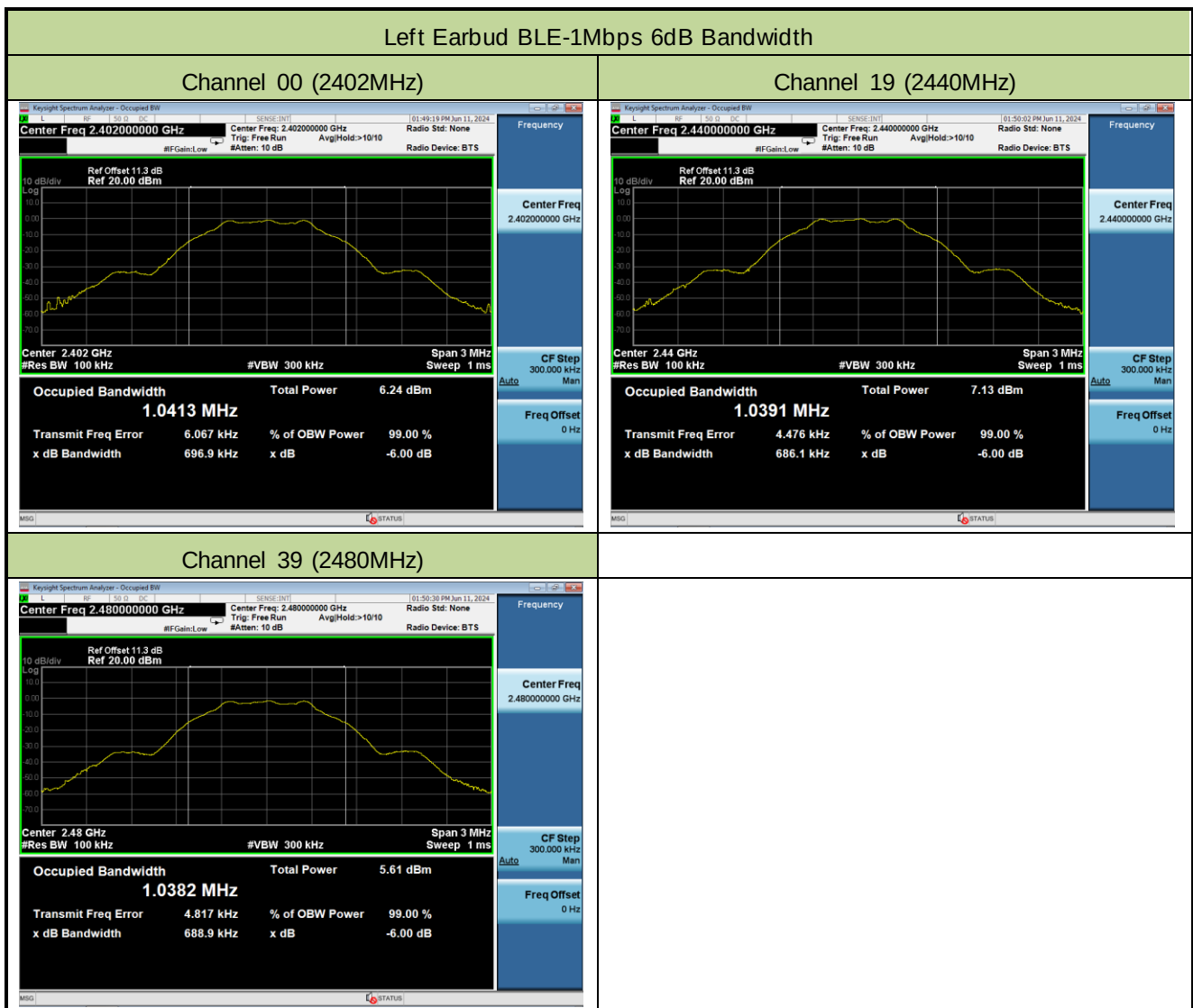
Test Mode	Duty Cycle
Left Earbud BLE-1Mbps	60.87%
Right Earbud BLE-1Mbps	60.87%
Duty Cycle (T = Transmission Duration)	
Left Earbud BLE-1Mbps (T = 380.8μs)	Right Earbud BLE-1Mbps (T = 380.8μs)

A.2 6dB Bandwidth Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2024-06-11 ~ 2024-06-12		

Test Mode	Data Rate	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Left Earbud					
BLE	1Mbps	00	2402	0.6969	≥ 0.5
BLE	1Mbps	19	2440	0.6861	≥ 0.5
BLE	1Mbps	39	2480	0.6889	≥ 0.5
Right Earbud					
BLE	1Mbps	00	2402	0.6961	≥ 0.5
BLE	1Mbps	19	2440	0.6935	≥ 0.5
BLE	1Mbps	39	2480	0.6950	≥ 0.5



Right Earbud BLE-1Mbps 6dB Bandwidth

Channel 00 (2402MHz)



Channel 19 (2440MHz)



Channel 39 (2480MHz)



A.3 Output Power Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2024-06-04 ~ 2024-06-11		

Test Result of Peak Output Power

Test Mode	Data Rate	Channel No.	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)	Result
Left Earbud						
BLE	1Mbps	00	2402	0.05	≤ 30.00	Pass
BLE	1Mbps	19	2440	1.03	≤ 30.00	Pass
BLE	1Mbps	39	2480	-0.49	≤ 30.00	Pass
Right Earbud						
BLE	1Mbps	00	2402	0.10	≤ 30.00	Pass
BLE	1Mbps	19	2440	1.12	≤ 30.00	Pass
BLE	1Mbps	39	2480	-0.49	≤ 30.00	Pass

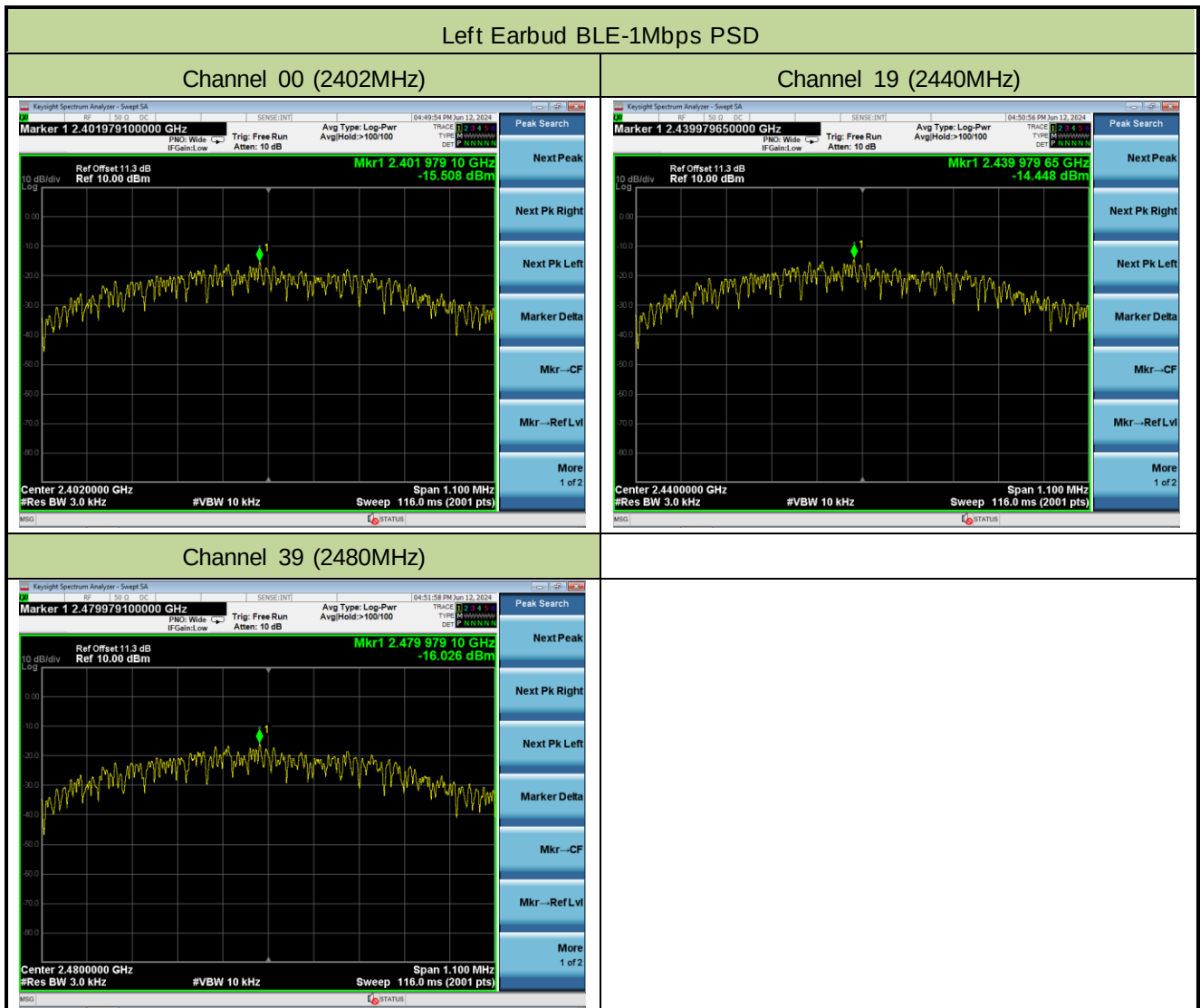
Test Result of Average Output Power (Reporting Only)

Test Mode	Data Rate	Channel No.	Frequency (MHz)	Average Power (dBm)	Limit (dBm)	Result
Left Earbud						
BLE	1Mbps	00	2402	-0.31	≤ 30.00	Pass
BLE	1Mbps	19	2440	0.71	≤ 30.00	Pass
BLE	1Mbps	39	2480	-0.82	≤ 30.00	Pass
Right Earbud						
BLE	1Mbps	00	2402	-0.28	≤ 30.00	Pass
BLE	1Mbps	19	2440	0.82	≤ 30.00	Pass
BLE	1Mbps	39	2480	-0.85	≤ 30.00	Pass

A.4 Power Spectral Density Test Result

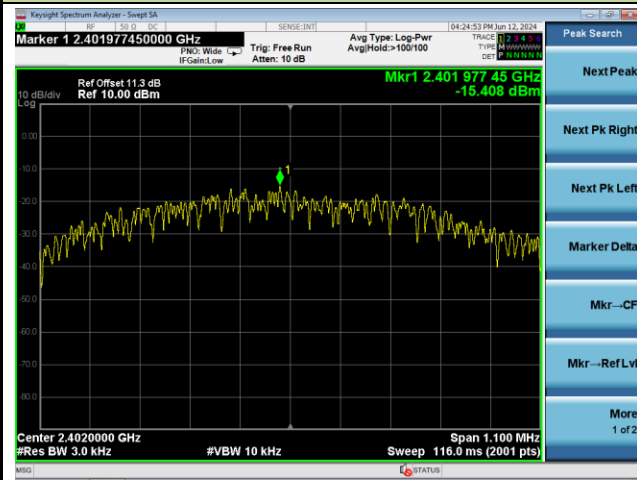
Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2024-06-12		

Test Mode	Data Rate	Channel No.	Frequency (MHz)	PSD Result (dBm / 3kHz)	Limit (dBm / 3kHz)	Result
Left Earbud						
BLE	1Mbps	00	2402	-15.508	≤ 8.00	Pass
BLE	1Mbps	19	2440	-14.448	≤ 8.00	Pass
BLE	1Mbps	39	2480	-16.026	≤ 8.00	Pass
Right Earbud						
BLE	1Mbps	00	2402	-15.408	≤ 8.00	Pass
BLE	1Mbps	19	2440	-14.245	≤ 8.00	Pass
BLE	1Mbps	39	2480	-16.068	≤ 8.00	Pass

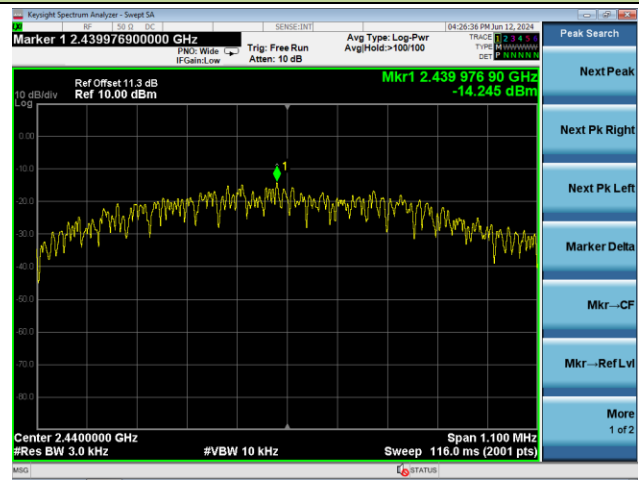


Right Earbud BLE-1Mbps PSD

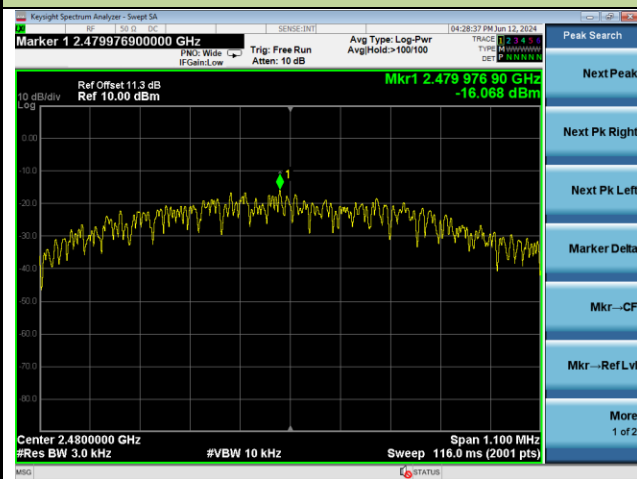
Channel 00 (2402MHz)



Channel 19 (2440MHz)



Channel 39 (2480MHz)



A.5 Conducted Band Edge and Out-of-Band Emissions Test Result

Test Site	NS-SR1	Test Engineer	Summer Tang
Test Date	2024-06-12		

Test Mode	Data Rate / Mbps	Channel No.	Frequency (MHz)	Limit (dBc)	Result
Left Earbud					
BLE	1	00	2402	20	Pass
BLE	1	19	2440	20	Pass
BLE	1	39	2480	20	Pass
Right Earbud					
BLE	1	00	2402	20	Pass
BLE	1	19	2440	20	Pass
BLE	1	39	2480	20	Pass

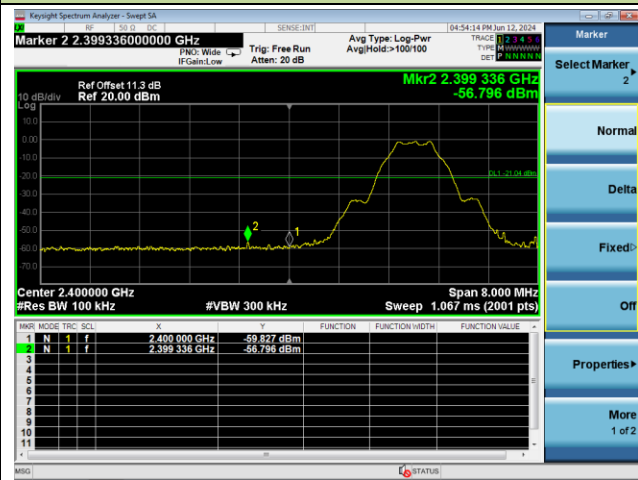
Left Earbud BLE-1Mbps Out-of-Band Emissions

Channel 00 (2402MHz)

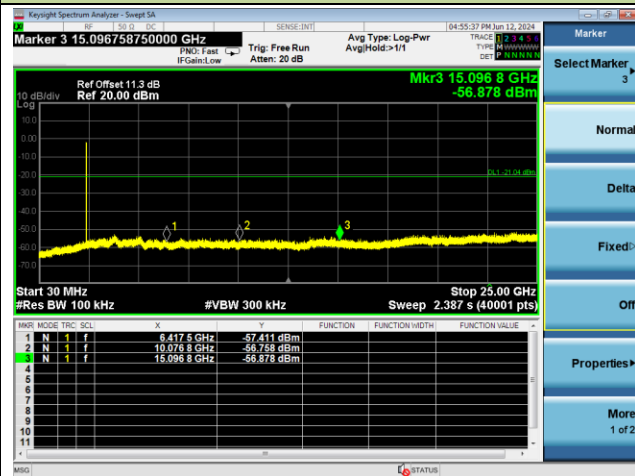
100kHz PSD Reference Level



Low Band Edge



Spurious Emission 30MHz ~ 25GHz

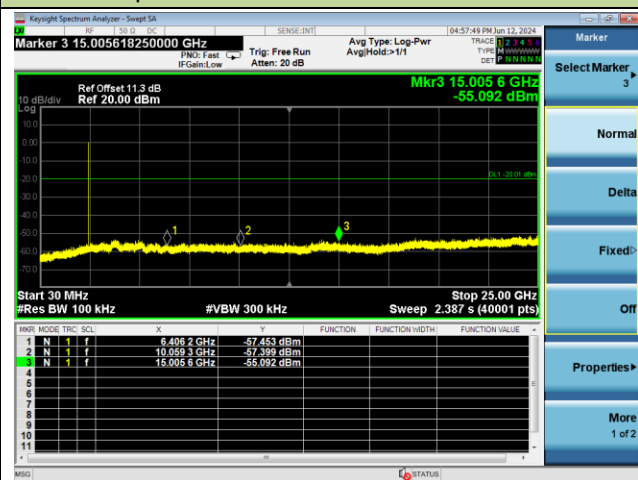


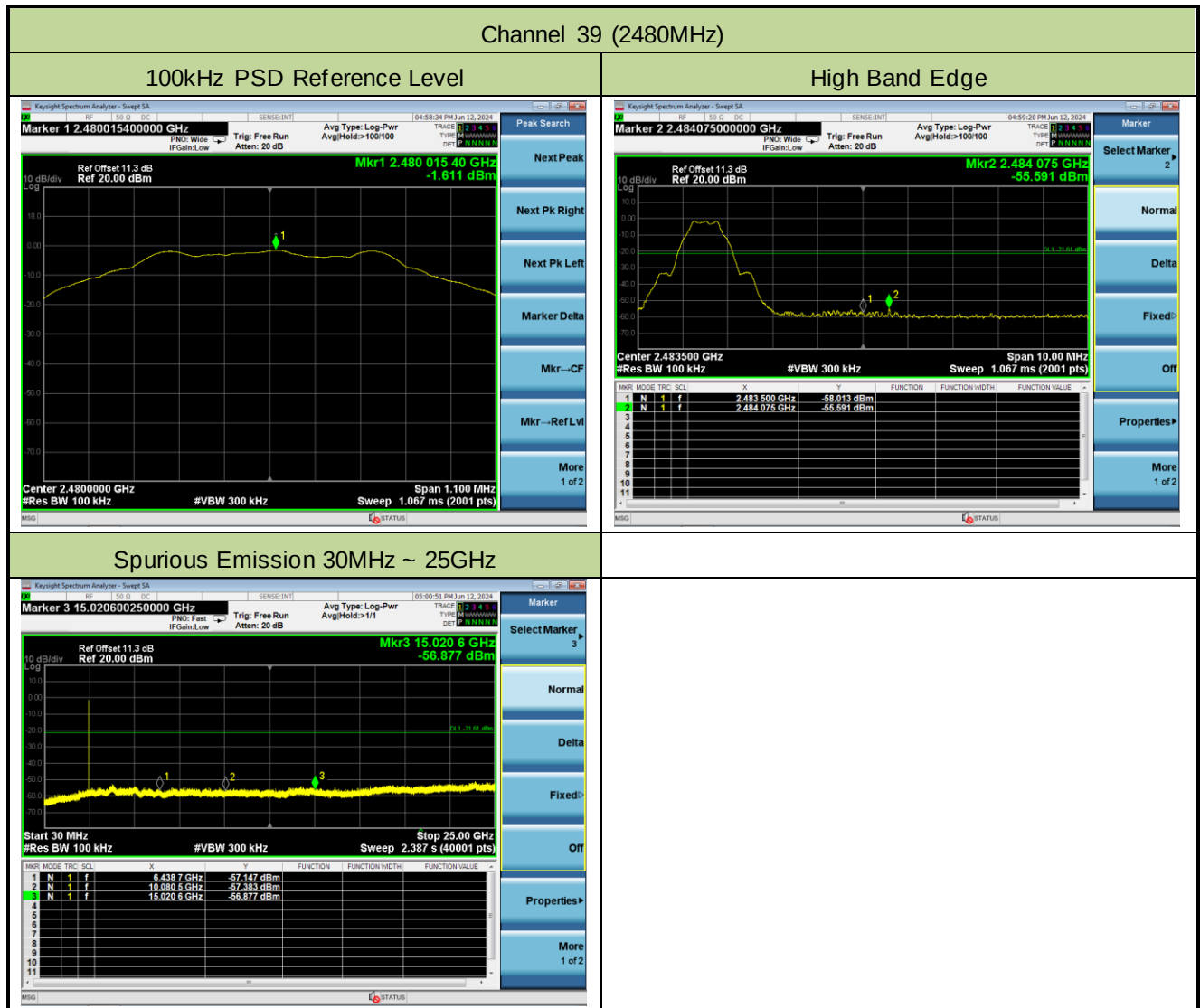
Channel 19 (2440MHz)

100kHz PSD Reference Level



Spurious Emission 30MHz ~ 25GHz





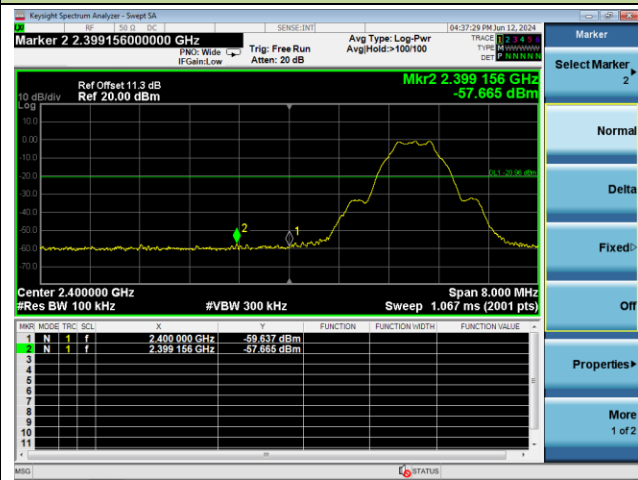
Right Earbud BLE-1Mbps Out-of-Band Emissions

Channel 00 (2402MHz)

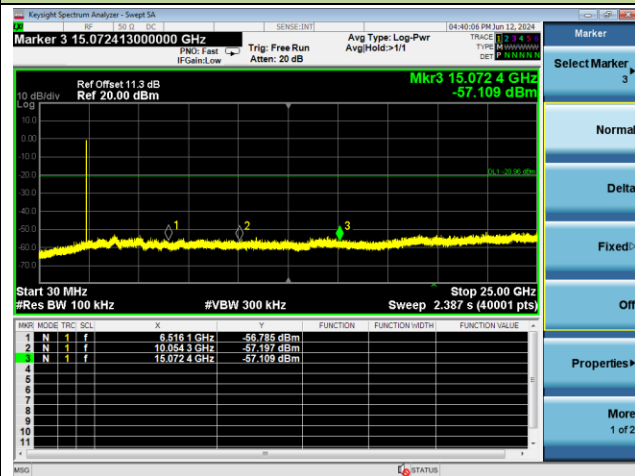
100kHz PSD Reference Level



Low Band Edge



Spurious Emission 30MHz ~ 25GHz

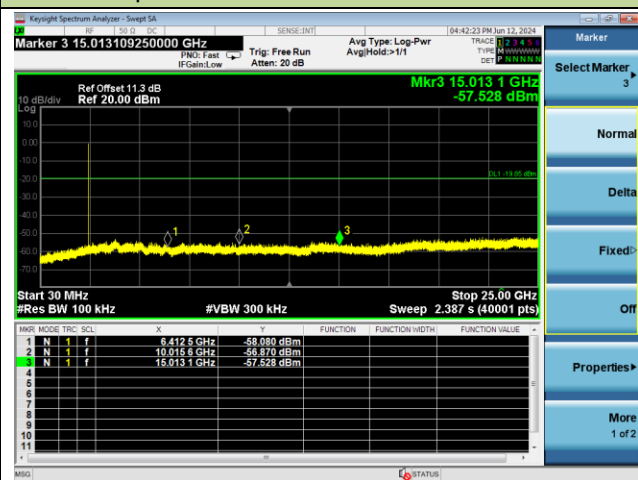


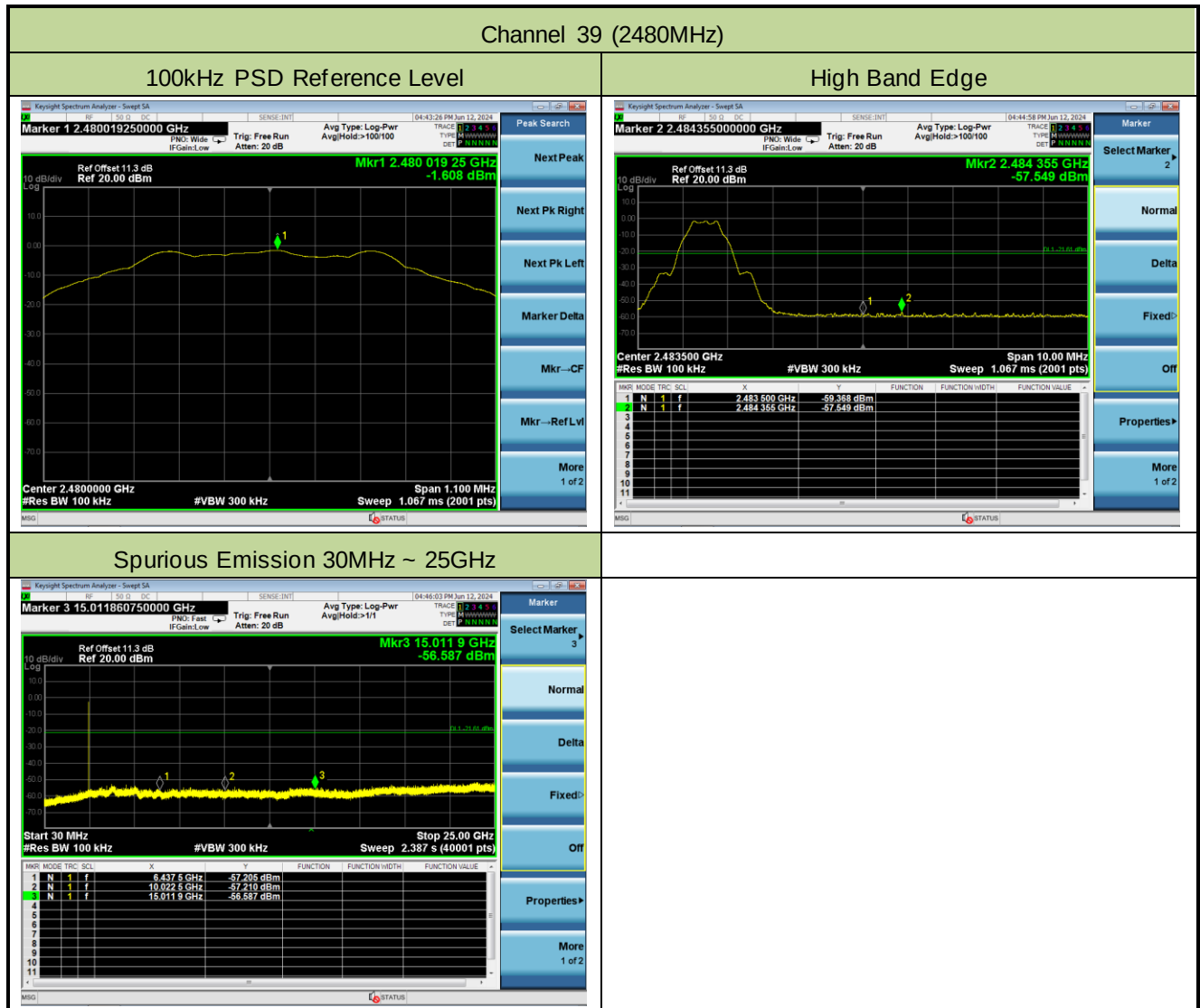
Channel 19 (2440MHz)

100kHz PSD Reference Level



Spurious Emission 30MHz ~ 25GHz





A.6 Radiated Spurious Emission Test Result

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2024-06-04 ~ 2024-06-05	Test Mode:	BLE-1Mbps (Left Earbud)
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detect or	Polarization
00	4842.0	37.7	3.5	41.2	74.0	-32.8	Peak	Horizontal
	8335.5	35.1	12.1	47.2	74.0	-26.8	Peak	Horizontal
	11463.5	32.3	18.5	50.8	74.0	-23.2	Peak	Horizontal
	4842.0	36.8	3.5	40.3	74.0	-33.7	Peak	Vertical
	7477.0	33.0	13.1	46.1	74.0	-27.9	Peak	Vertical
	10945.0	33.1	17.7	50.8	74.0	-23.2	Peak	Vertical
19	4689.0	36.2	3.7	39.9	74.0	-34.1	Peak	Horizontal
	8080.5	34.9	11.8	46.7	74.0	-27.3	Peak	Horizontal
	11463.5	32.2	18.5	50.7	74.0	-23.3	Peak	Horizontal
	4663.5	36.4	3.4	39.8	74.0	-34.2	Peak	Vertical
	7434.5	33.1	13.1	46.2	74.0	-27.8	Peak	Vertical
	11132.0	32.8	18.2	51.0	74.0	-23.0	Peak	Vertical
39	5139.5	36.1	4.5	40.6	74.0	-33.4	Peak	Horizontal
	8361.0	35.2	12.2	47.4	74.0	-26.6	Peak	Horizontal
	11038.5	33.2	17.9	51.1	74.0	-22.9	Peak	Horizontal
	4816.5	36.8	3.5	40.3	74.0	-33.7	Peak	Vertical
	7332.5	33.6	12.7	46.3	74.0	-27.7	Peak	Vertical
	11217.0	32.0	18.7	50.7	74.0	-23.3	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	NS-AC1	Test Engineer	Ted Chen
Test Date	2024-06-04 ~ 2024-06-05	Test Mode:	BLE-1Mbps (Right Earbud)
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

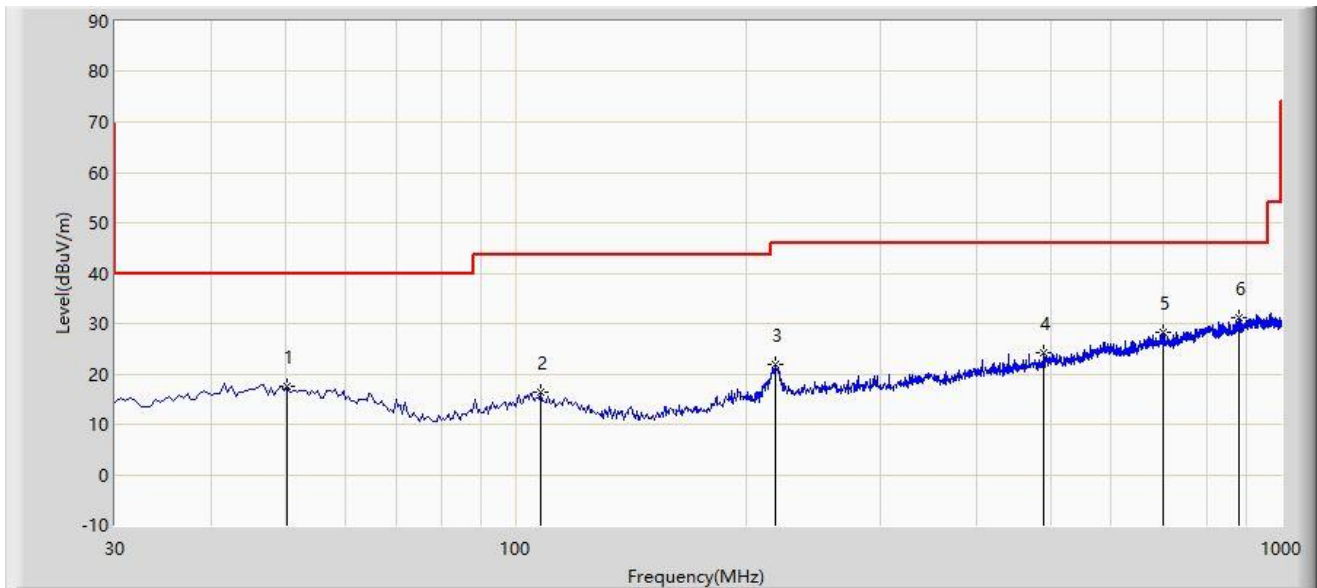
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detect or	Polarization
00	4340.5	35.1	1.6	36.7	74.0	-37.3	Peak	Horizontal
	7528.0	32.0	12.9	44.9	74.0	-29.1	Peak	Horizontal
	11480.5	30.3	18.7	49.0	74.0	-25.0	Peak	Horizontal
	4944.0	35.1	3.5	38.6	74.0	-35.4	Peak	Vertical
	8080.5	34.0	11.8	45.8	74.0	-28.2	Peak	Vertical
	10936.5	31.8	17.6	49.4	74.0	-24.6	Peak	Vertical
19	4961.0	35.0	3.7	38.7	74.0	-35.3	Peak	Horizontal
	7681.0	32.3	12.2	44.5	74.0	-29.5	Peak	Horizontal
	11030.0	30.8	17.9	48.7	74.0	-25.3	Peak	Horizontal
	5105.5	35.7	4.5	40.2	74.0	-33.8	Peak	Vertical
	8267.5	32.5	11.7	44.2	74.0	-29.8	Peak	Vertical
	11761.0	31.2	18.4	49.6	74.0	-24.4	Peak	Vertical
39	4663.5	35.2	3.4	38.6	74.0	-35.4	Peak	Horizontal
	7366.5	32.2	12.8	45.0	74.0	-29.0	Peak	Horizontal
	10894.0	30.9	18.0	48.9	74.0	-25.1	Peak	Horizontal
	4689.0	34.0	3.7	37.7	74.0	-36.3	Peak	Vertical
	8072.0	33.1	11.8	44.9	74.0	-29.1	Peak	Vertical
	11361.5	30.5	18.5	49.0	74.0	-25.0	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The Result of Radiated Emission below 1GHz:

Site: NS-AC1	Test Date: 2024-06-05
Limit: FCC_Part15.209_RSE(3m)	Engineer: Ted Chen
Probe: NS-AC1_VULB9162	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE 1M at 2440MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		50.370	17.607	-1.254	-22.393	40.000	18.861	PK
2		108.085	16.394	-0.263	-27.106	43.500	16.658	PK
3		218.180	21.941	5.128	-24.059	46.000	16.814	PK
4		490.265	24.325	0.919	-21.675	46.000	23.406	PK
5		700.270	28.381	1.474	-17.619	46.000	26.907	PK
6	*	878.750	31.063	1.854	-14.937	46.000	29.209	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

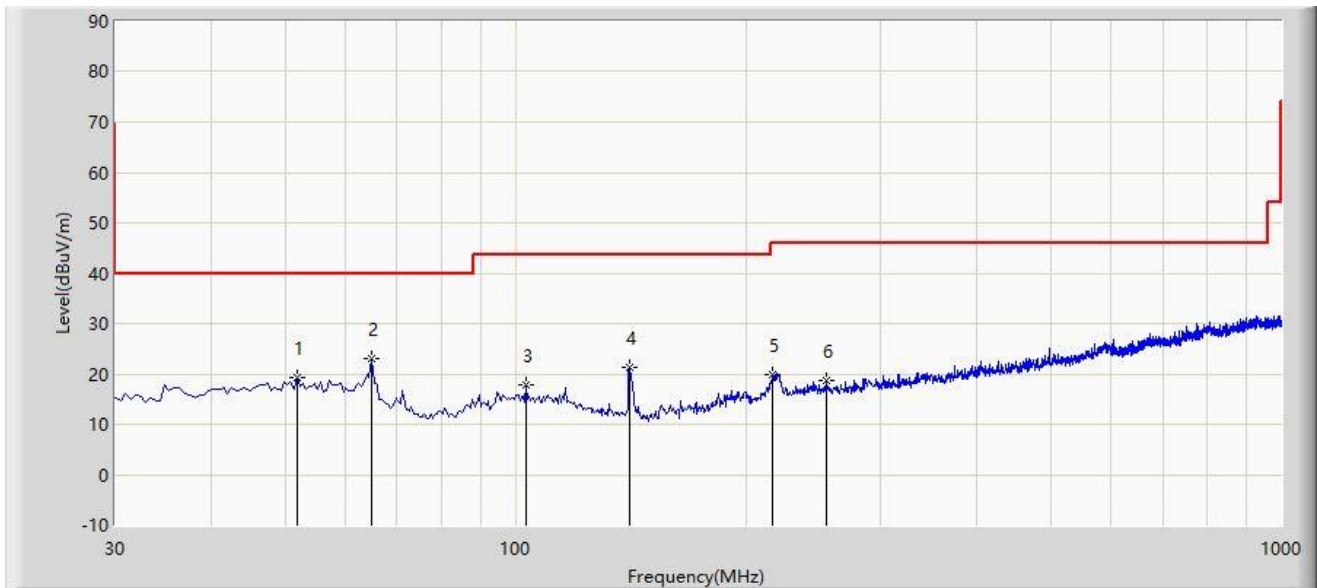
Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Note 5: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.

Site: NS-AC1	Test Date: 2024-06-05
Limit: FCC_Part15.209_RSE(3m)	Engineer: Ted Chen
Probe: NS-AC1_VULB9162	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE 1M at 2440MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		51.825	19.193	0.396	-20.807	40.000	18.798	PK
2	*	64.920	23.061	6.663	-16.939	40.000	16.398	PK
3		103.235	17.842	1.143	-25.658	43.500	16.699	PK
4		141.065	21.200	7.965	-22.300	43.500	13.236	PK
5		216.725	19.987	3.254	-26.013	46.000	16.733	PK
6		255.040	18.659	0.120	-27.341	46.000	18.539	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

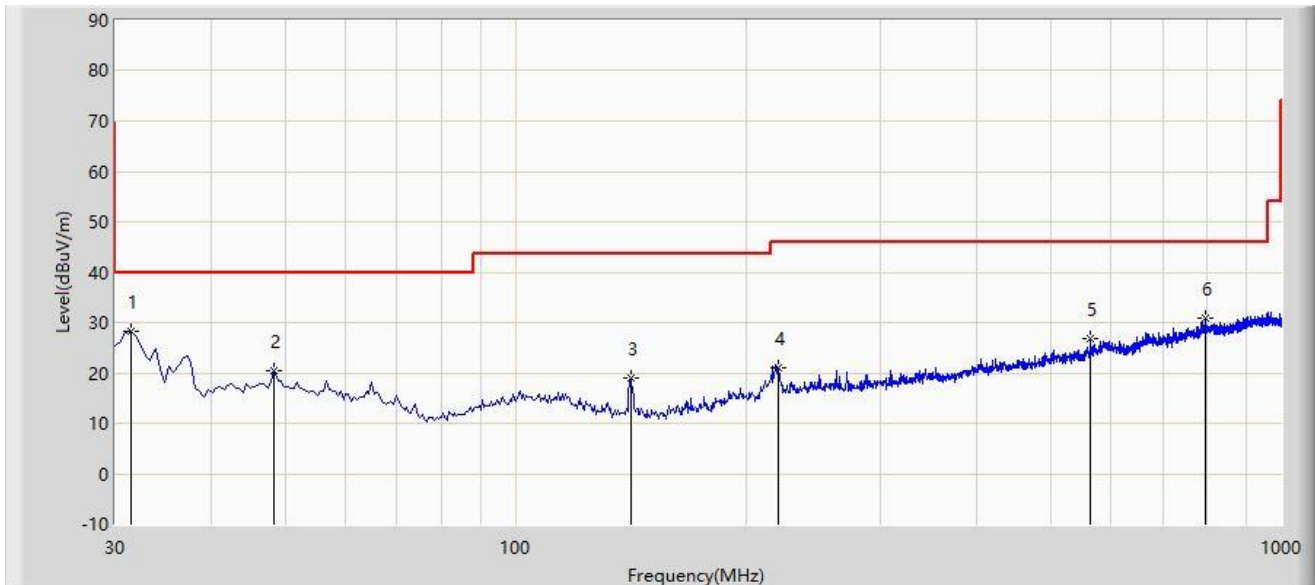
Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Note 5: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.

Site: NS-AC1	Test Date: 2024-06-05
Limit: FCC_Part15.209_RSE(3m)	Engineer: Ted Chen
Probe: NS-AC1_VULB9162	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE 1M at 2440MHz	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB/m)	Type
1	*	31.455	28.297	12.964	-11.703	40.000	15.334	PK
2		48.430	20.475	1.604	-19.525	40.000	18.871	PK
3		141.550	19.102	5.885	-24.398	43.500	13.217	PK
4		220.605	20.944	3.972	-25.056	46.000	16.972	PK
5		563.985	26.735	2.146	-19.265	46.000	24.590	PK
6		797.270	30.949	1.877	-15.051	46.000	29.072	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB/m).

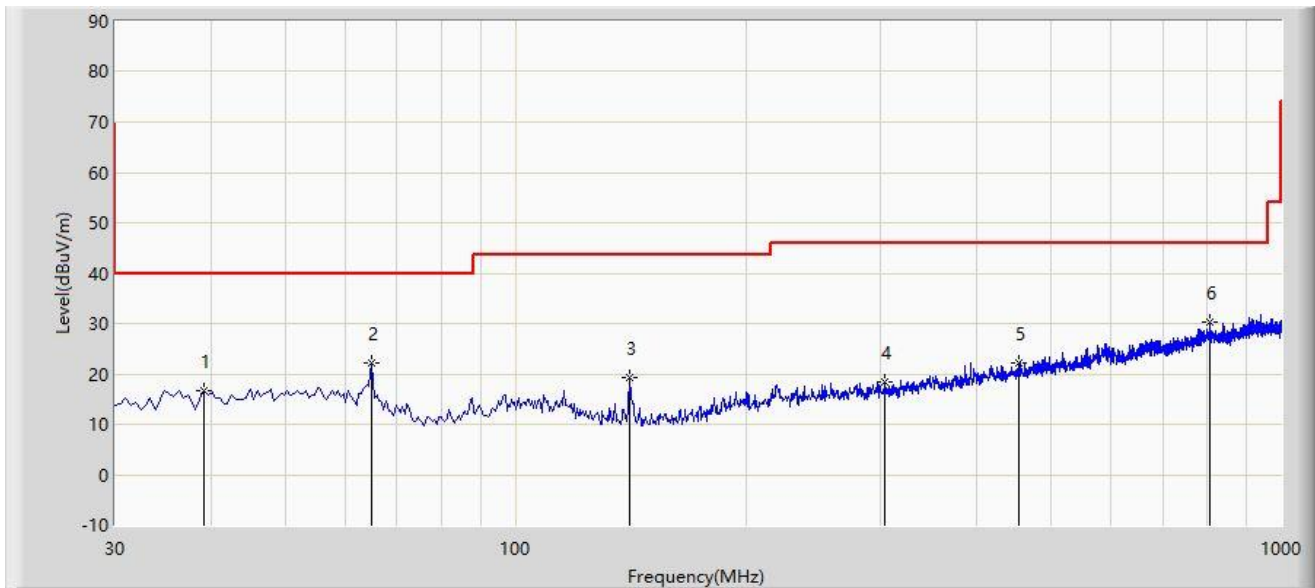
Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Note 5: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.

Site: NS-AC1	Test Date: 2024-06-05
Limit: FCC_Part15.209_RSE(3m)	Engineer: Ted Chen
Probe: NS-AC1_VULB9162	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE 1M at 2440MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		39.215	16.646	-0.998	-23.354	40.000	17.644	PK
2		64.920	22.295	5.897	-17.705	40.000	16.398	PK
3		141.065	19.143	5.908	-24.357	43.500	13.236	PK
4		303.540	18.378	-0.823	-27.622	46.000	19.201	PK
5		453.405	22.223	-0.277	-23.777	46.000	22.501	PK
6	*	806.000	30.219	1.244	-15.781	46.000	28.975	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

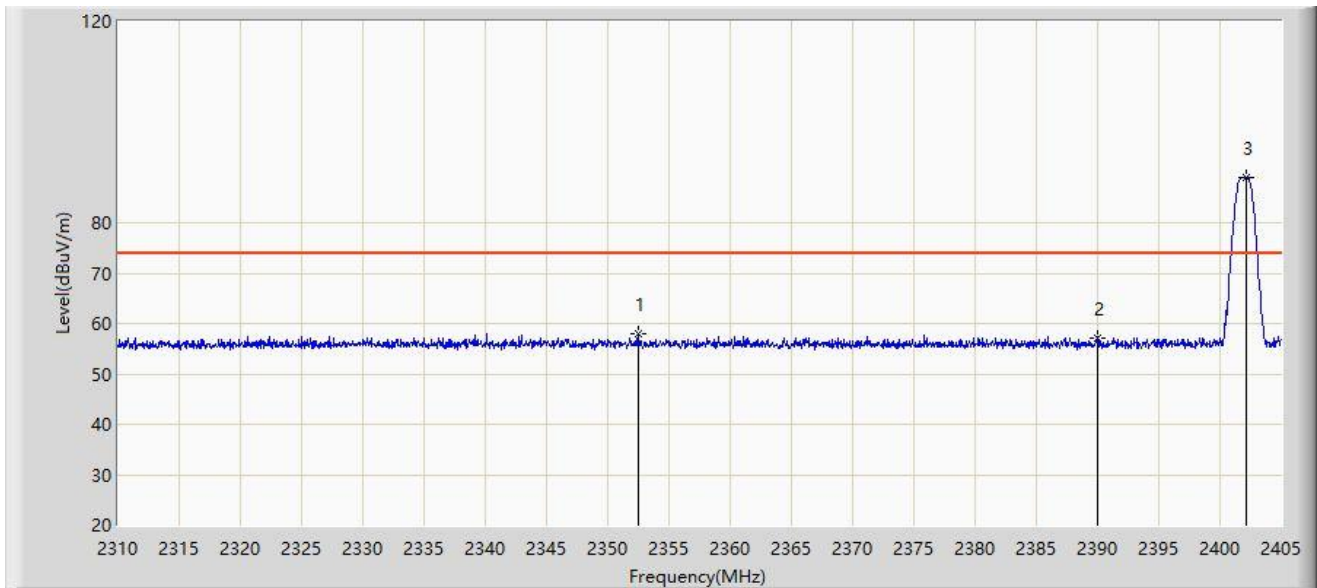
Note 4: Quasi-Peak measurement was not performed when peak measure level was lower than the quasi-peak limit.

Note 5: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value.

Therefore, the data is not presented in the report.

A.7 Radiated Restricted Band Edge Test Result

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2402MHz	



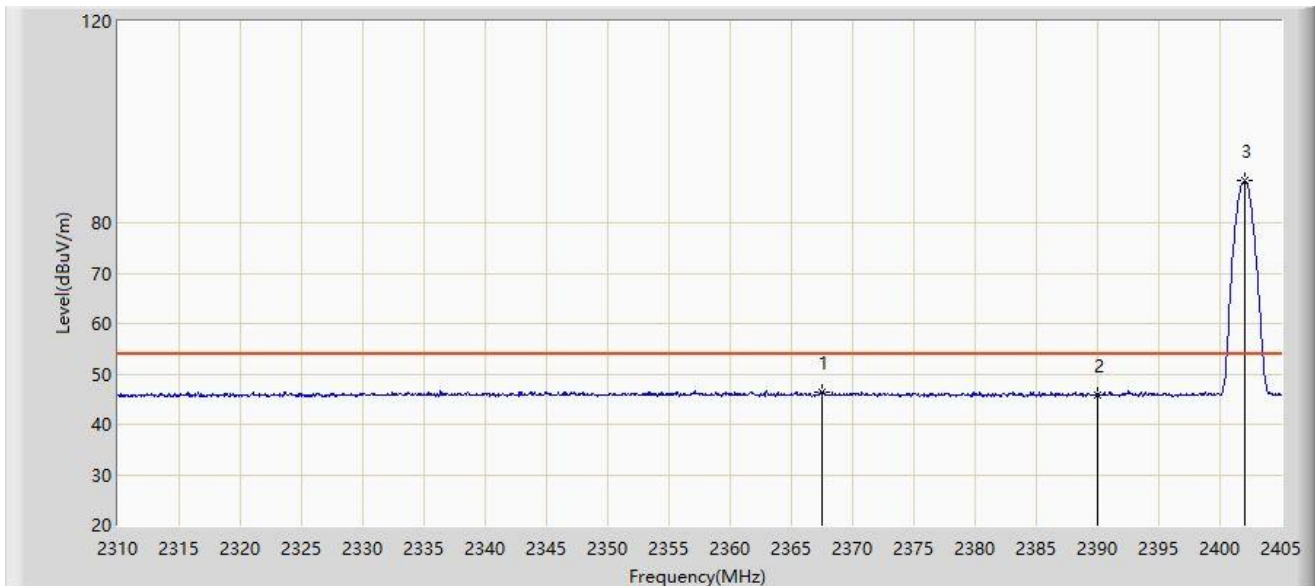
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2352.465	58.060	25.812	-15.940	74.000	32.248	PK
2		2390.000	57.039	24.881	-16.961	74.000	32.159	PK
3		2402.198	89.123	56.970	N/A	N/A	32.153	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2402MHz	



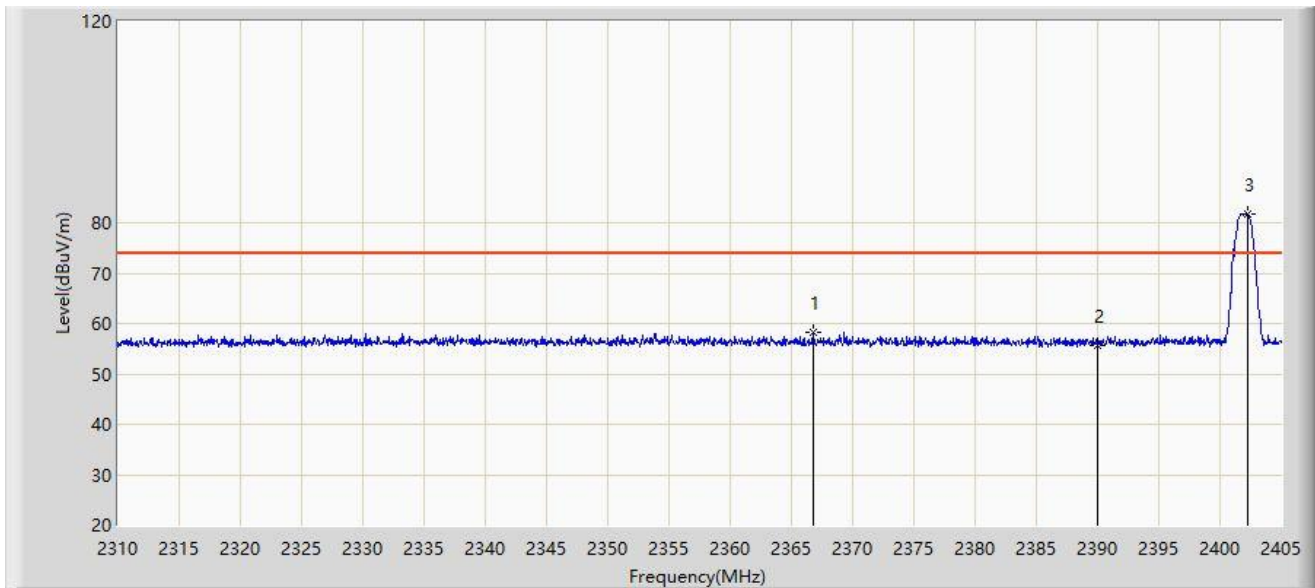
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2367.522	46.334	14.155	-7.666	54.000	32.179	AV
2		2390.000	45.811	13.653	-8.189	54.000	32.159	AV
3		2402.055	88.303	56.150	N/A	N/A	32.153	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2402MHz	



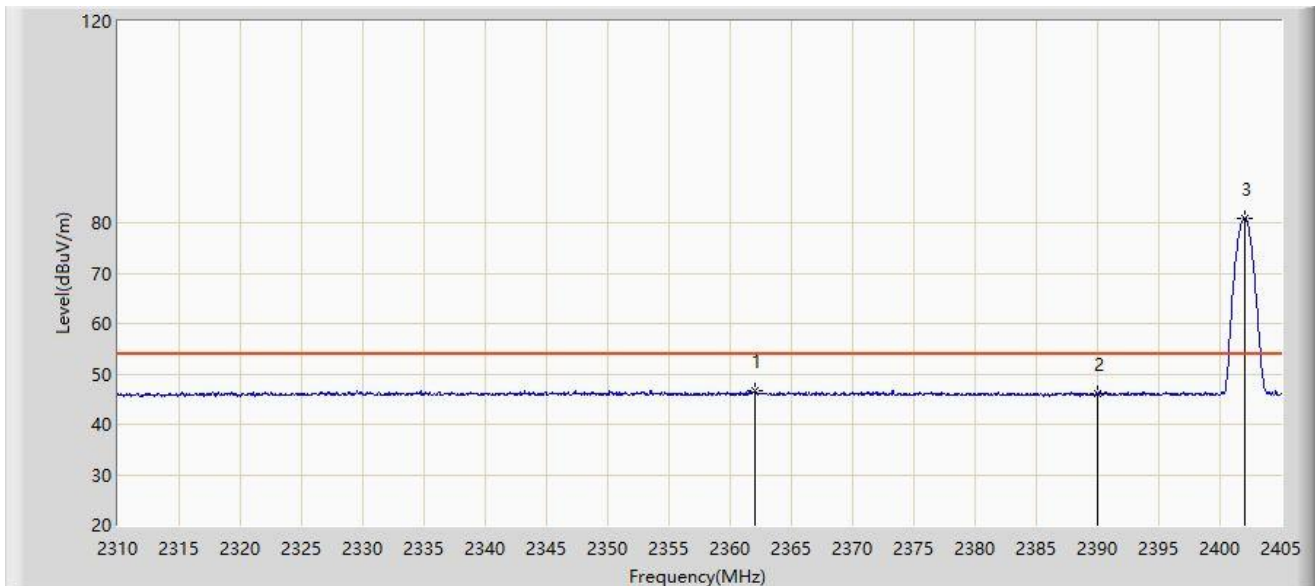
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2366.762	58.211	26.028	-15.789	74.000	32.183	PK
2		2390.000	55.671	23.513	-18.329	74.000	32.159	PK
3		2402.245	81.739	49.586	N/A	N/A	32.153	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2402MHz	



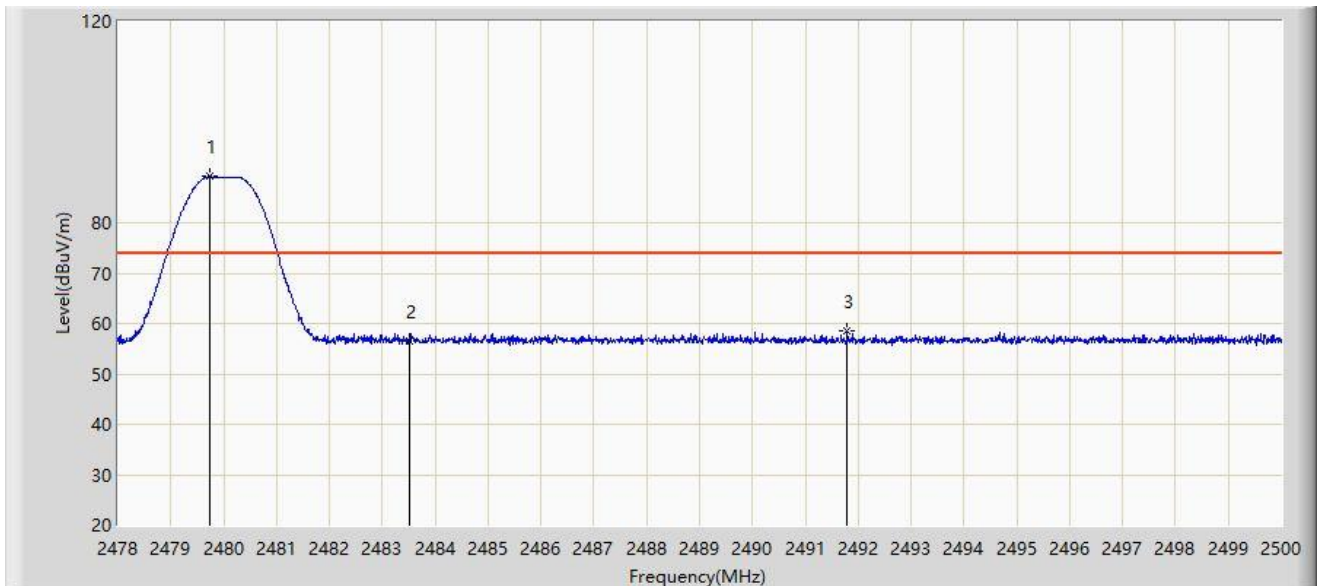
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2362.060	46.628	14.421	-7.372	54.000	32.206	AV
2		2390.000	46.039	13.881	-7.961	54.000	32.159	AV
3		2402.008	80.832	48.679	N/A	N/A	32.153	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2480MHz	



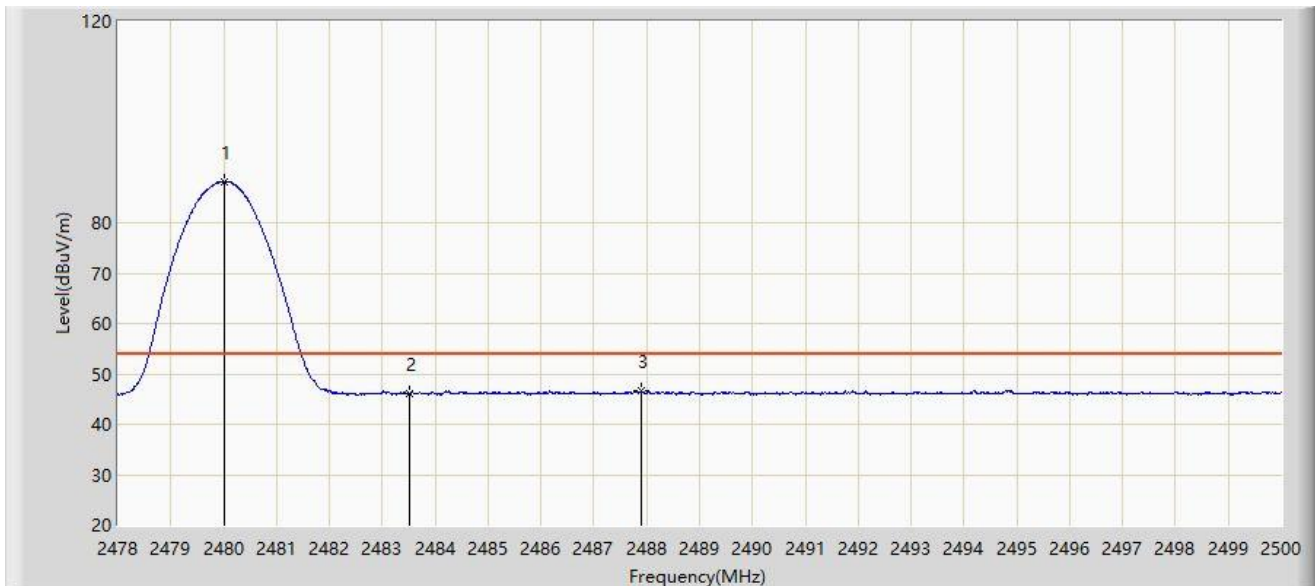
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.738	89.152	57.026	N/A	N/A	32.126	PK
2		2483.500	56.615	24.479	-17.385	74.000	32.136	PK
3	*	2491.794	58.615	26.459	-15.385	74.000	32.156	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2480MHz	



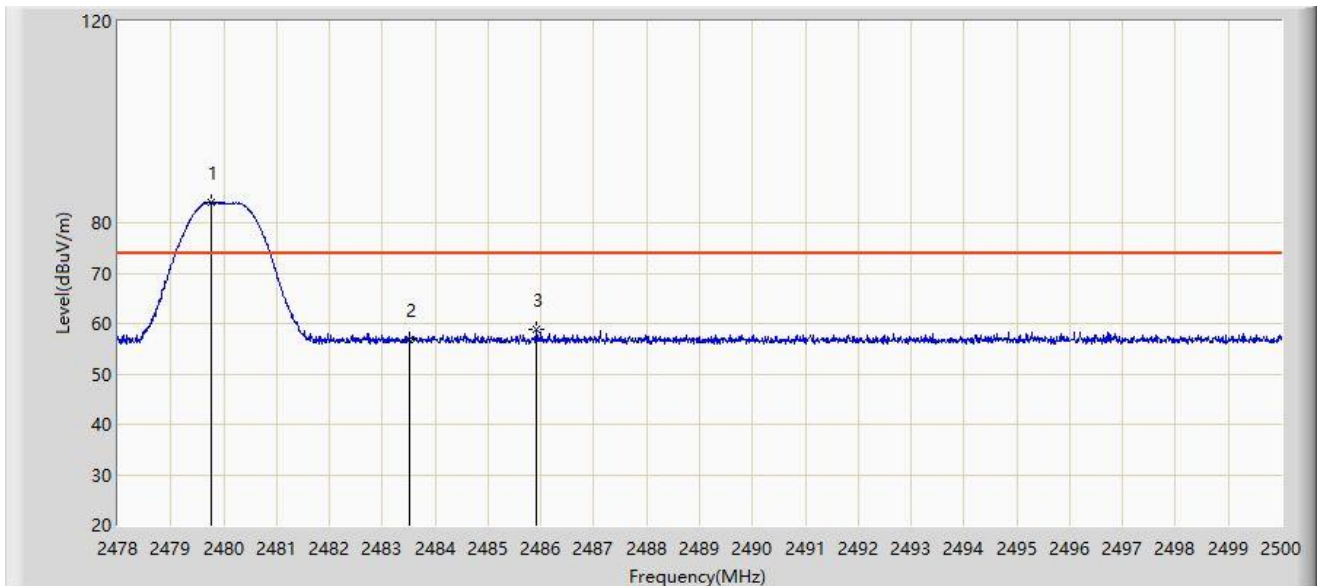
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.002	88.201	56.074	N/A	N/A	32.127	AV
2		2483.500	46.048	13.912	-7.952	54.000	32.136	AV
3	*	2487.889	46.575	14.428	-7.425	54.000	32.147	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2480MHz	



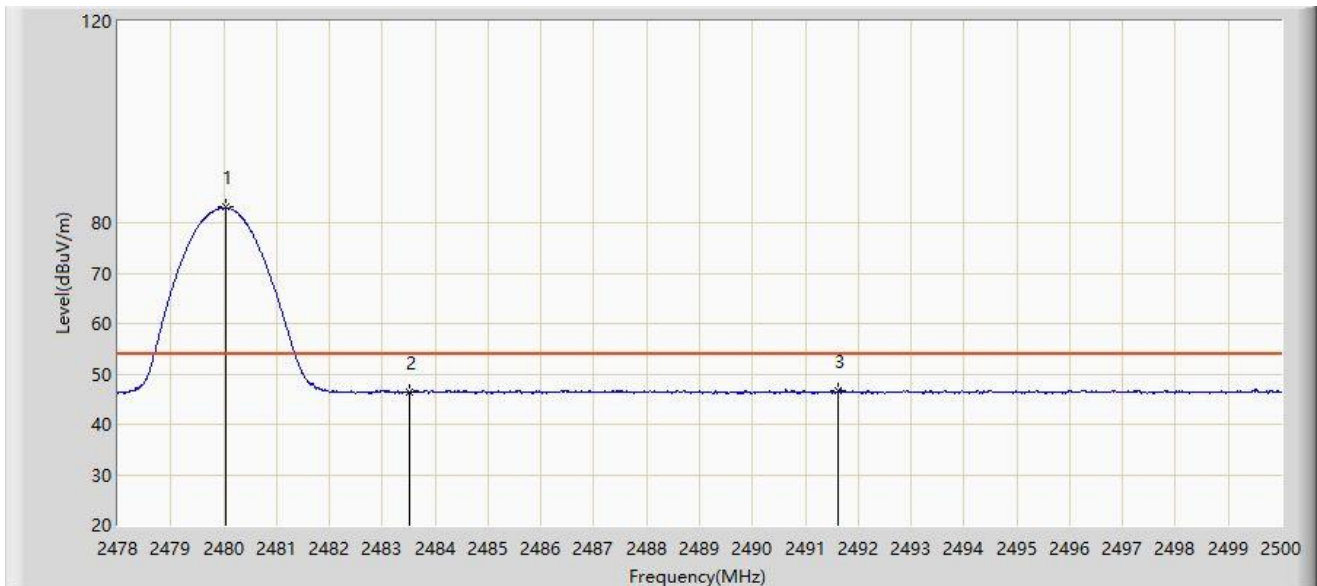
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2479.771	84.114	51.988	N/A	N/A	32.126	PK
2		2483.500	56.828	24.692	-17.172	74.000	32.136	PK
3	*	2485.920	58.799	26.657	-15.201	74.000	32.142	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Left Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2480MHz	



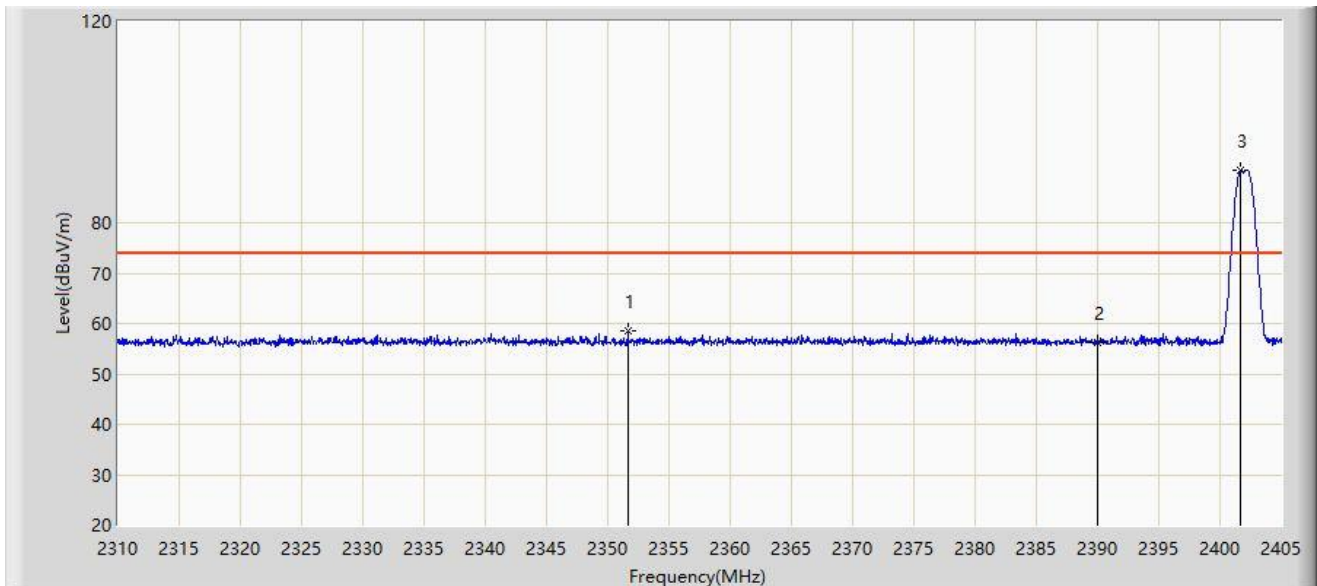
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.046	83.045	50.918	N/A	N/A	32.127	AV
2		2483.500	46.403	14.267	-7.597	54.000	32.136	AV
3	*	2491.629	46.597	14.441	-7.403	54.000	32.156	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2402MHz	



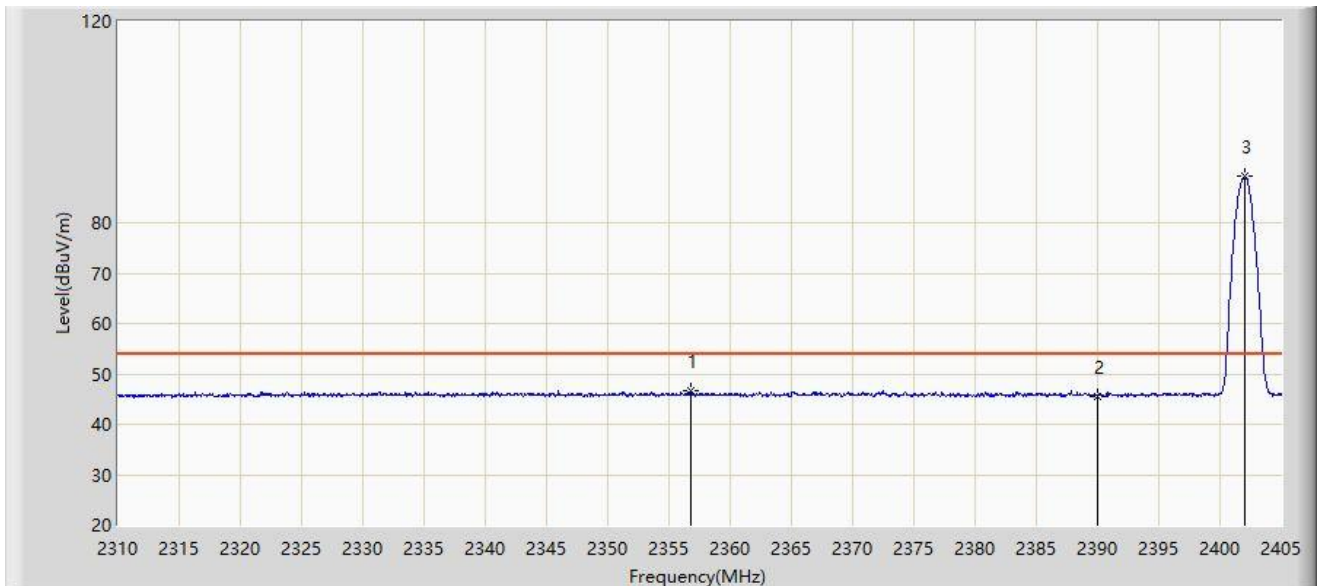
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2351.657	58.426	26.175	-15.574	74.000	32.251	PK
2		2390.000	56.105	23.947	-17.895	74.000	32.159	PK
3		2401.722	90.388	58.234	N/A	N/A	32.154	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2402MHz	



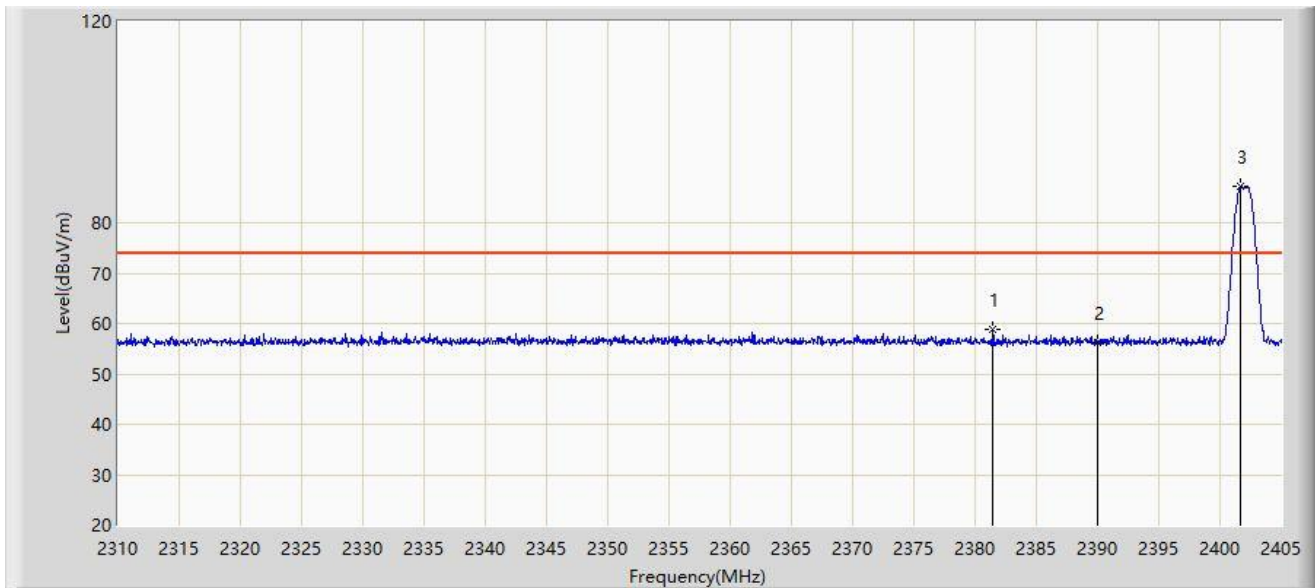
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2356.835	46.607	14.377	-7.393	54.000	32.231	AV
2		2390.000	45.622	13.464	-8.378	54.000	32.159	AV
3		2402.008	89.132	56.979	N/A	N/A	32.153	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2402MHz	



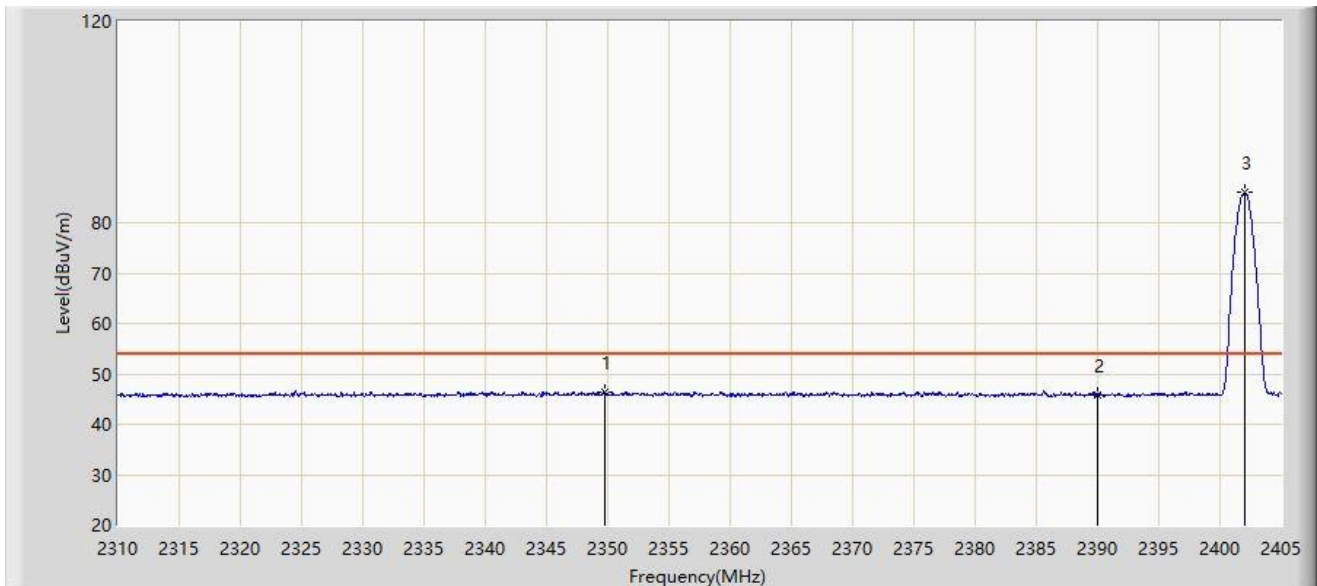
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2381.488	58.869	26.728	-15.131	74.000	32.140	PK
2		2390.000	56.256	24.098	-17.744	74.000	32.159	PK
3		2401.722	87.154	55.000	N/A	N/A	32.154	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2402MHz	



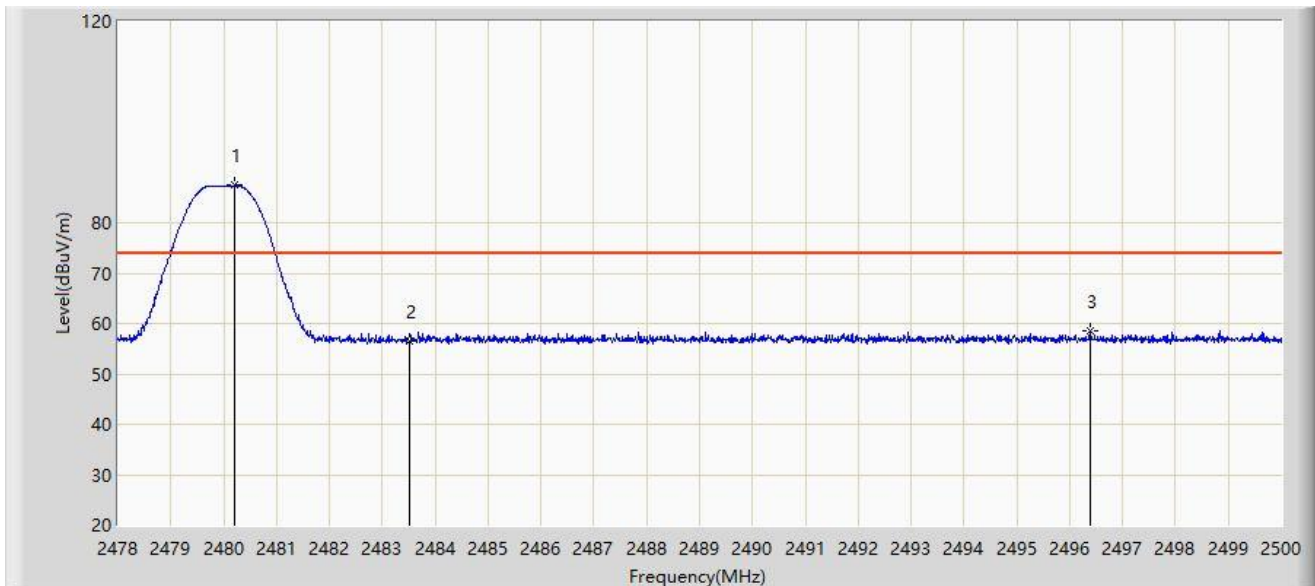
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2349.758	46.353	14.094	-7.647	54.000	32.259	AV
2		2390.000	45.804	13.646	-8.196	54.000	32.159	AV
3		2402.008	85.943	53.790	N/A	N/A	32.153	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2480MHz	



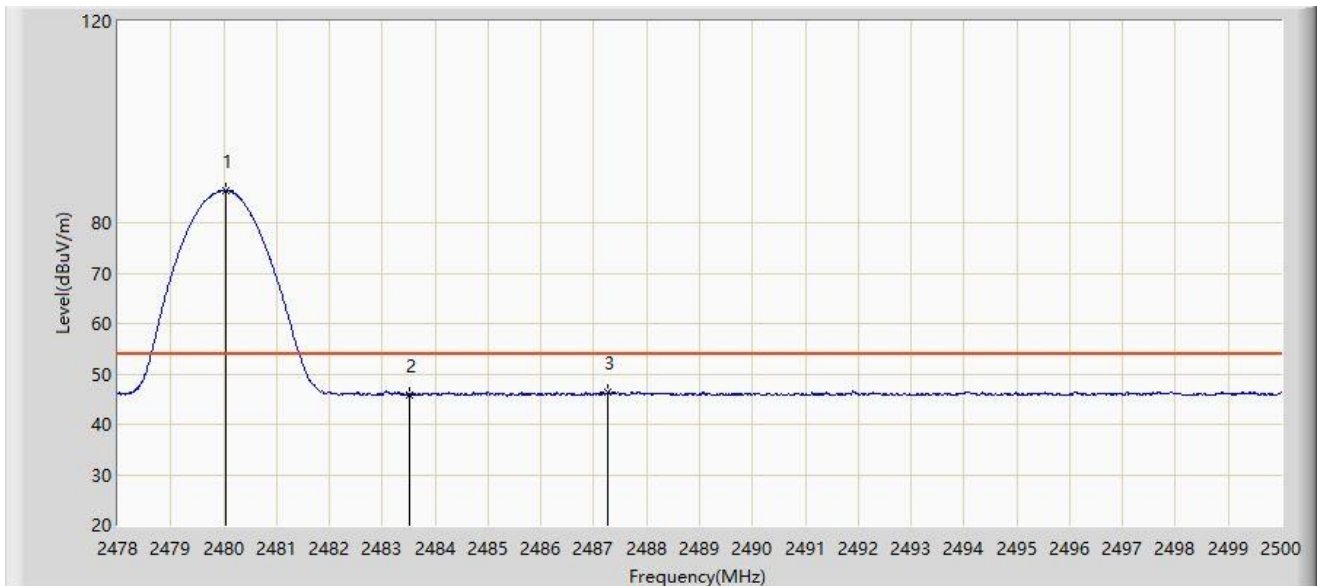
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.211	87.449	55.321	N/A	N/A	32.127	PK
2		2483.500	56.485	24.349	-17.515	74.000	32.136	PK
3	*	2496.392	58.547	26.380	-15.453	74.000	32.167	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Horizontal
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2480MHz	



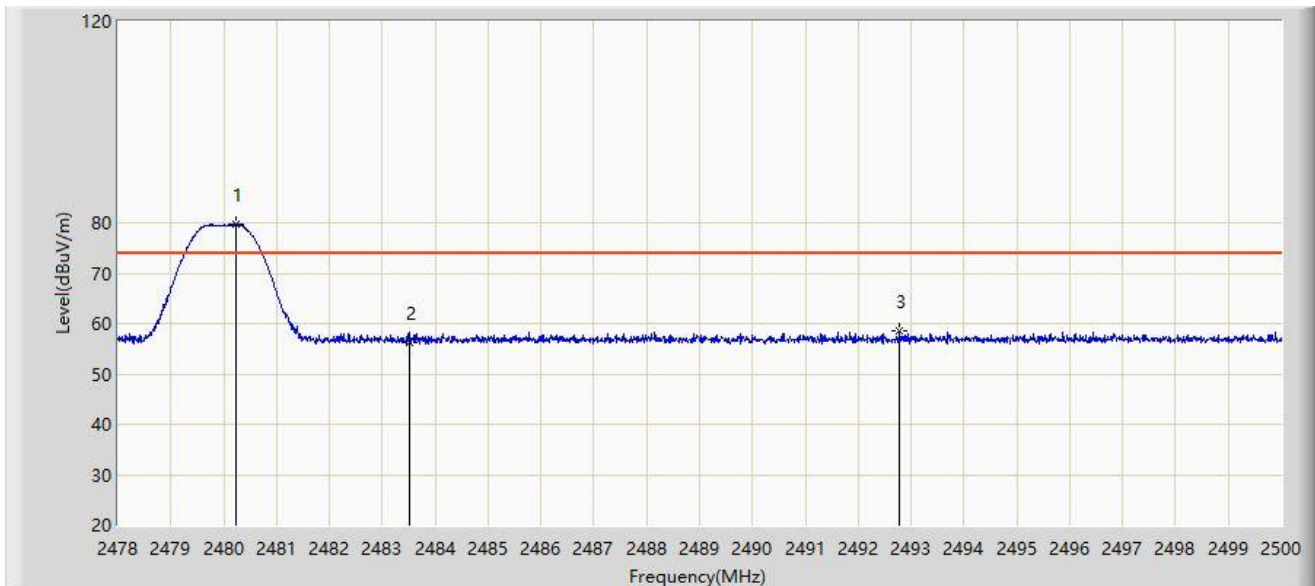
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.046	86.386	54.259	N/A	N/A	32.127	AV
2		2483.500	45.917	13.781	-8.083	54.000	32.136	AV
3	*	2487.262	46.371	14.226	-7.629	54.000	32.145	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2480MHz	



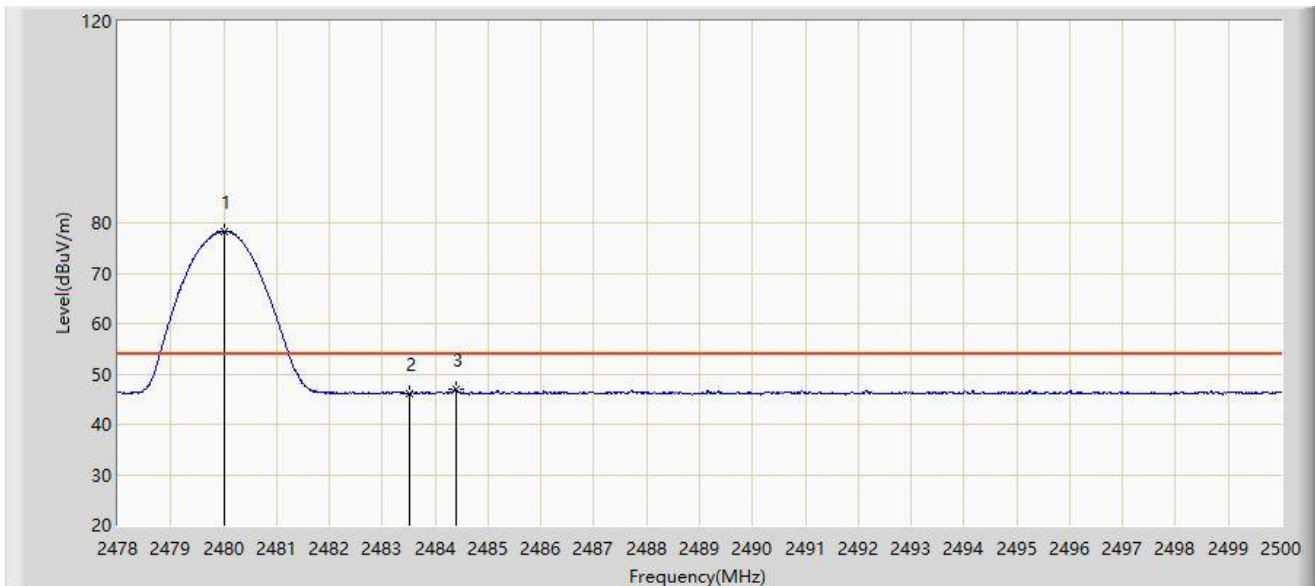
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.233	79.789	47.661	N/A	N/A	32.128	PK
2		2483.500	56.138	24.002	-17.862	74.000	32.136	PK
3	*	2492.784	58.429	26.270	-15.571	74.000	32.159	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: NS-AC1	Test Date: 2024-06-04
Limit: FCC_2.4G_RE(3m)	Engineer: Ted Chen
Probe: NS-AC1_BBHA9120D_2111_1-18GHz	Polarity: Vertical
EUT: True Wireless Earbuds with Active Noise Cancellation (Right Earbud)	Power: By Battery
Test Mode: Transmit by BLE-1M at 2480MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2480.013	78.292	46.165	N/A	N/A	32.127	AV
2		2483.500	46.030	13.894	-7.970	54.000	32.136	AV
3	*	2484.391	47.037	14.899	-6.963	54.000	32.138	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Appendix B - Test Setup Photograph

Refer to “2406RSZ004-UT” file.

Appendix C - EUT Photograph

Refer to “2406RSZ004-UE” file.

The End
